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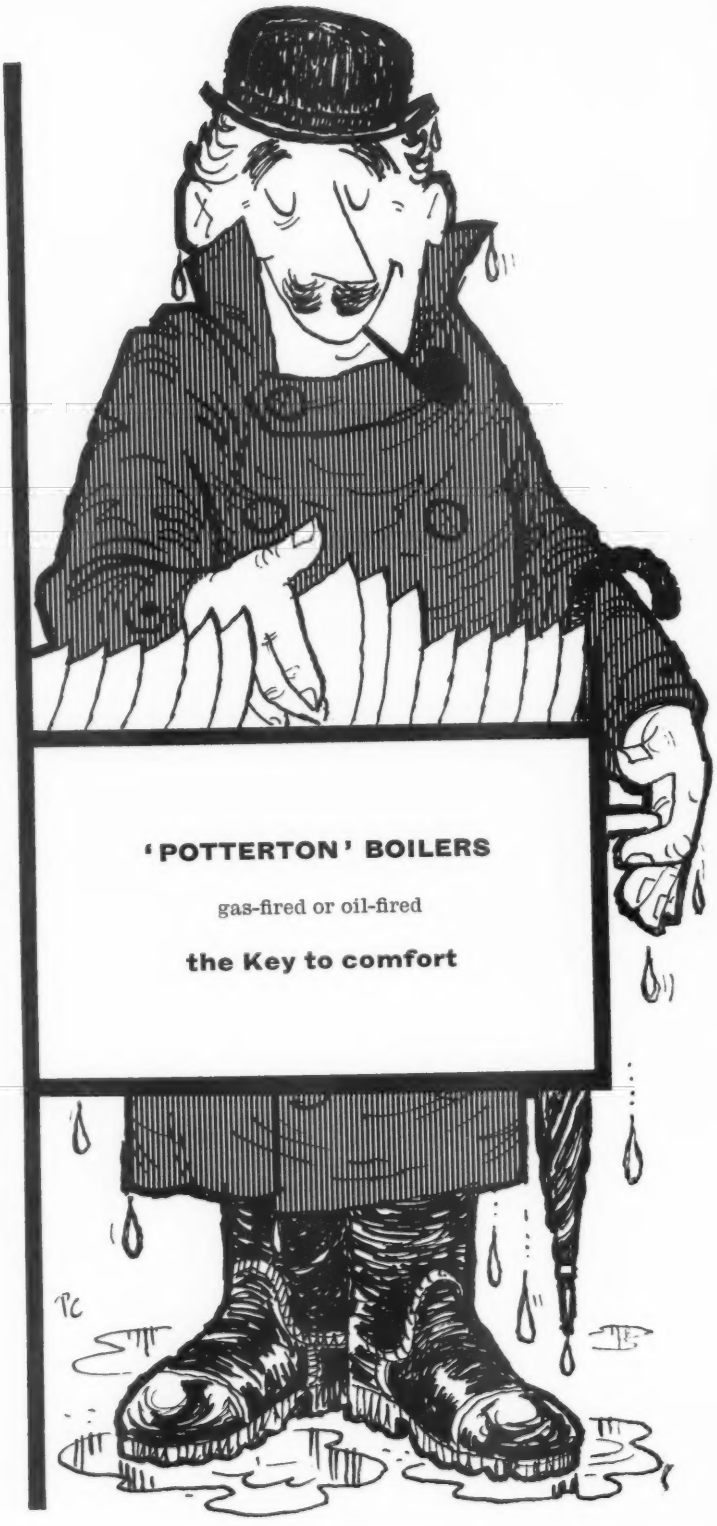

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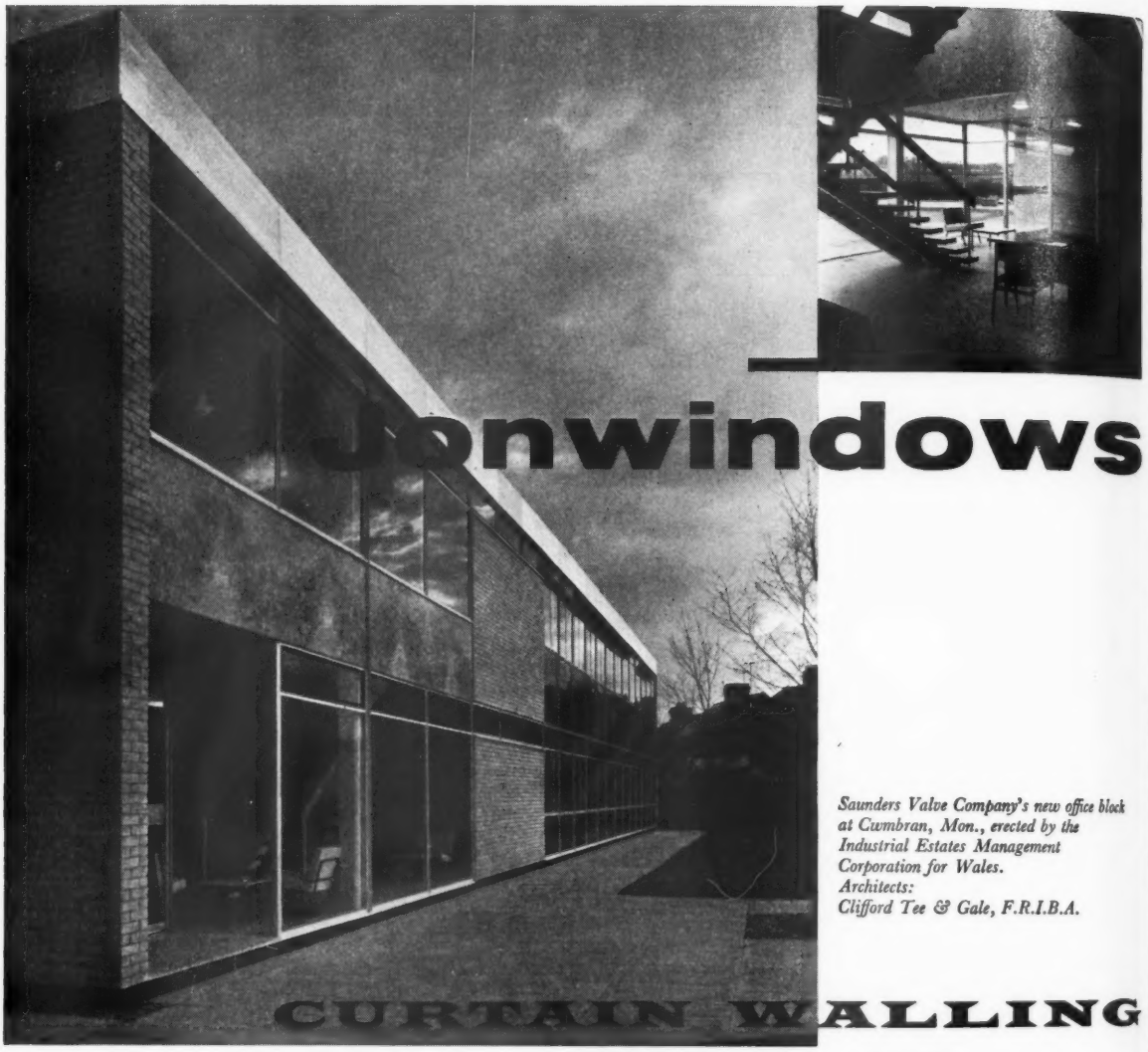

Jonwindows CURTAIN WALLING

Saunders Valve Company's new office block at Cwmbran, Mon., erected by the Industrial Estates Management Corporation for Wales.
Architects:
Clifford Tee & Gale, F.R.I.B.A.

Jonwindows Galvanized Steel Curtain Walling—Seen here spanning two storeys, with 4″ cruciform supporting ribs at 6′ 0″ module, bracketed off floor beams. An allowance for vertical expansion is incorporated at the head of the curtain walling and an anodized aluminium fascia forms a capping around the whole perimeter. The grey Armourclad infil panels are secured by aluminium beads.
Pressed steel closers between walls and curtain walling ensure complete office division where required. The curtain walling rests on a pressed metal cill incorporating a condensation channel fixed to a 4½″ skin of brickwork. The imposing entrance foyer has an aluminium screen and double swing armour-plate entrance doors with stainless steel push plates.

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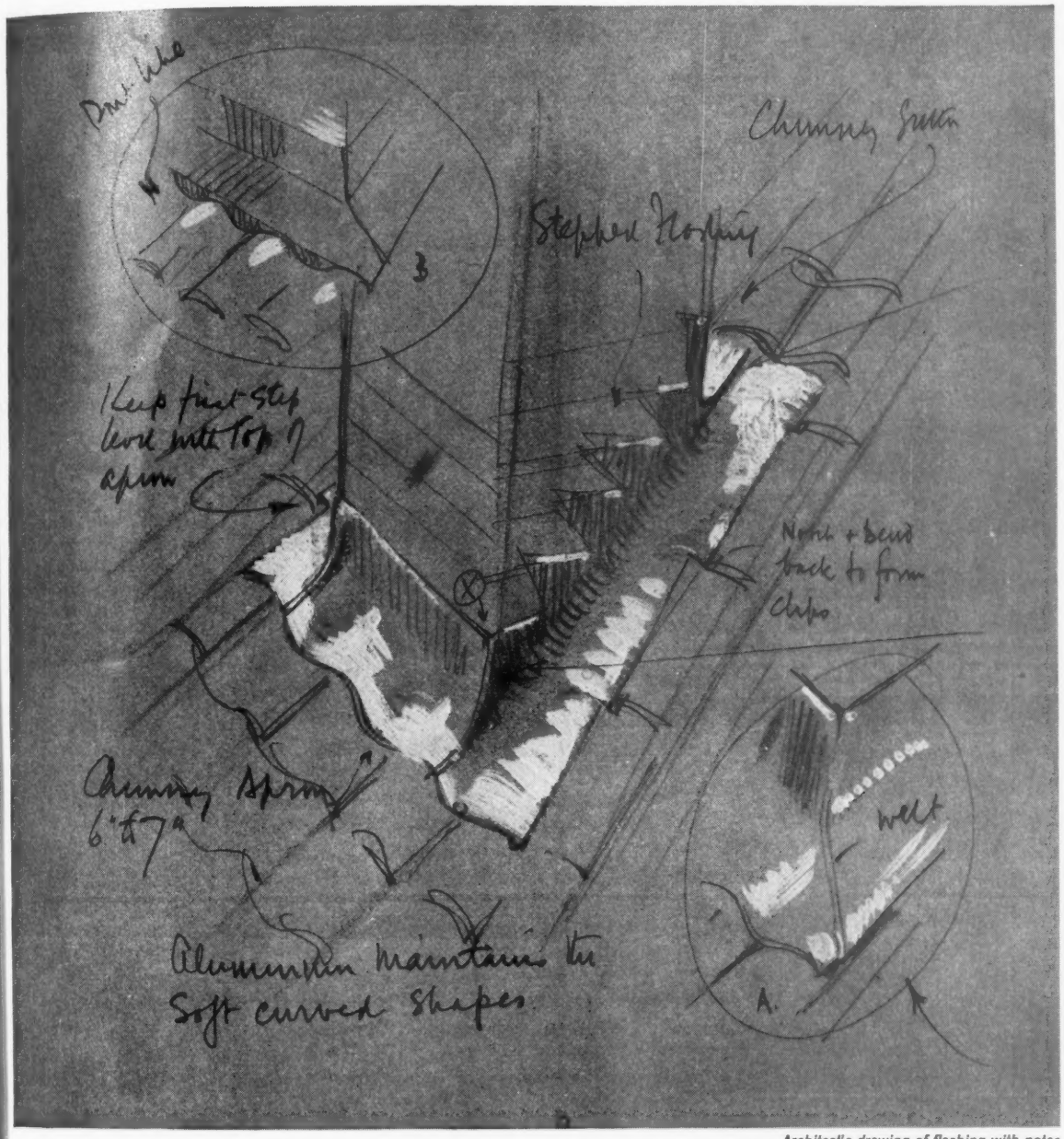

Architect's drawing of flashing with notes

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VACANT SITE TO FULL PRODUCTION IN 17 MONTHS

The £700,000 Hoddesdon project is another example of how Cubitts' go-ahead construction approach is helping industry.

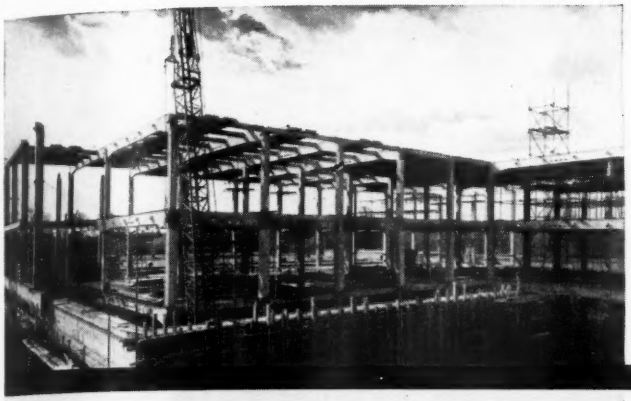
Merck, Sharp and Dohme, pharmaceutical manufacturers needed their new laboratory building as quickly as possible. So they and their architects, Edward D. Mills & Partners, F/ARIBA, nominated Cubitts for the project.

It was decided to use prestressed and precast reinforced concrete construction. This method advanced progress by many weeks, cutting out the time needed for on-site concrete work, and offsetting shortage of suitable labour around Hoddesdon. Time and cost were saved, too, by planning to optimum usage of plant for the size of concrete units employed.

To ease their client's output problem even more quickly, Cubitts arranged to complete first the middle portion of the new building, which contained the main mechanical services. By installing the service risers in one vertical duct, floor levels were served and put into use as general construction work finished on each.

Only 11 months after delivery of the first precast columns, the new building was producing for Cubitts' client, and six months later the take-over was complete. Through early collaboration with client and architect, Cubitts were able to complete the plant much sooner than with orthodox construction methods.

Another reason was Cubitts' co-ordinated construction service which brought in their associates Engineering Service Installations Ltd. for mechanical services and plant erection, Concrete Development Co. Ltd. for the concrete frame, and their own Joinery and Painting Departments for specialist work.



Another Cubitts' client is on the way up! Precast main beams and 65 ft. long reinforced concrete columns were made by Concrete Development Co. A member of Cubitts organisation, they collaborated closely with the Consulting Engineers J. C. Hughes & Partners.

The new Merck, Sharp and Dohme laboratory building at Hoddesdon incorporates the latest air conditioning, sterilising and refrigeration plant, 67 feet high. The building covers a total floor area of about 75,000 square feet on a ½ acre site that provides for future expansion.

Mr. T. W. Rayner, Managing Director of Merck, Sharp and Dohme, says: "I can fully endorse the value of collaboration from the planning stage between client, architect and contractor. Knowing the difficulties involved in planning and constructing our Hoddesdon plant, I am fully satisfied with the results: not only did we go into full production within 17 months, but construction costs were kept strictly within the original estimate."

Mr. R. D. McLeod, Director of Cubitts, says: "We like to have the opportunity of participating in the planning of our clients' projects. Fast construction at economic cost follows from the application of specialist services and practical experience available within our organisation. Applied at Hoddesdon, this was a major factor in the successful completion of the project."

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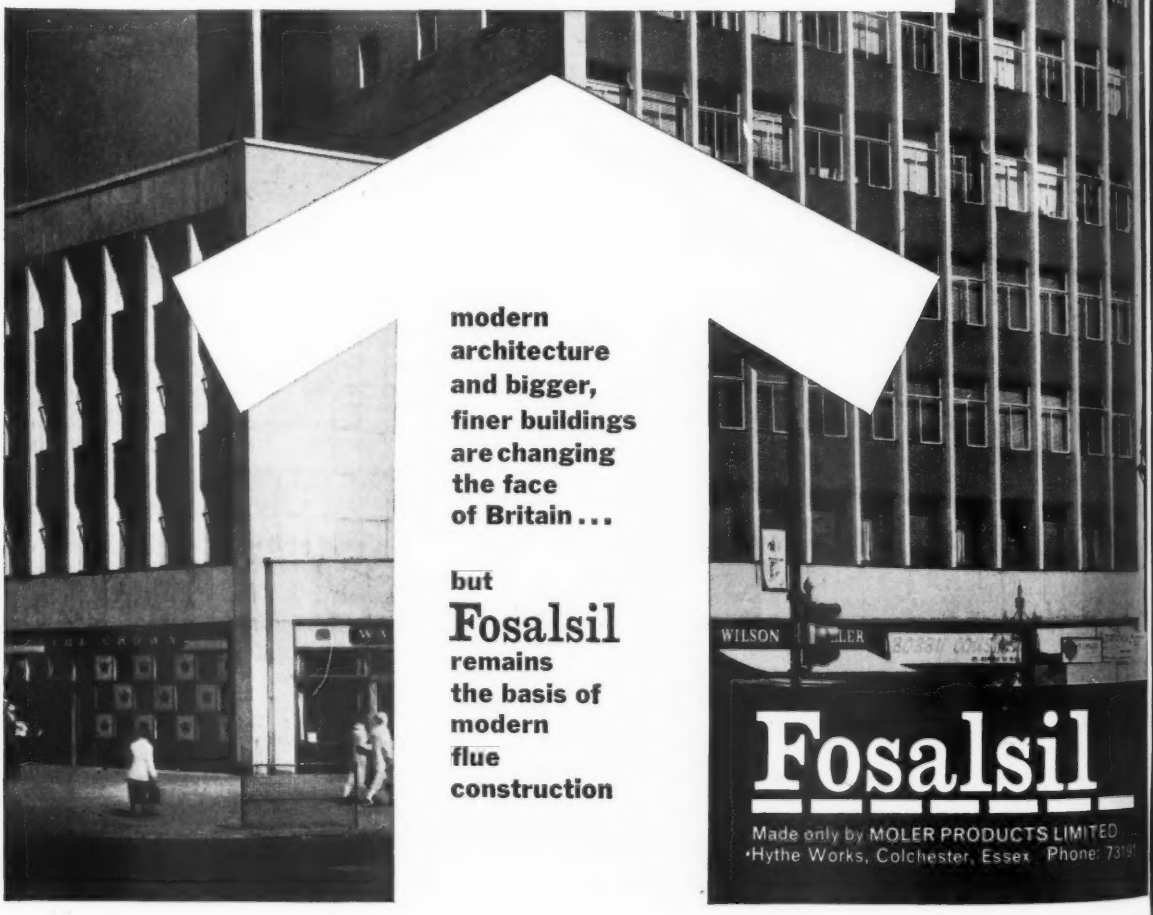

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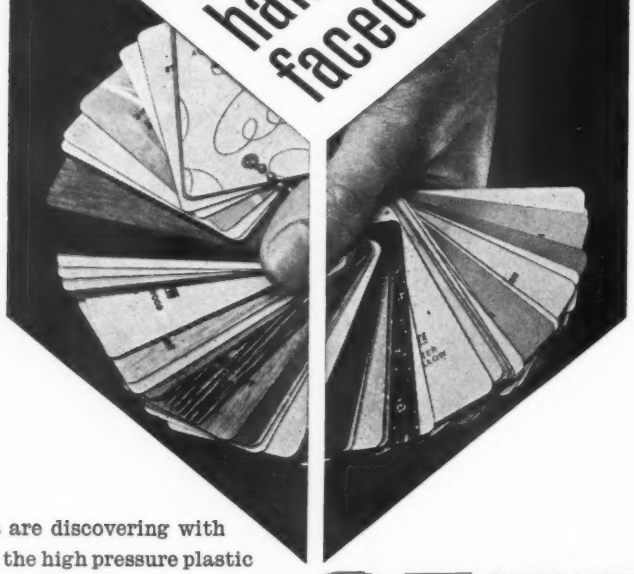

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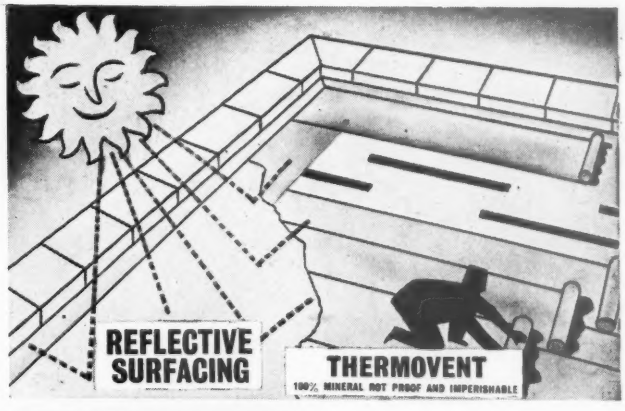

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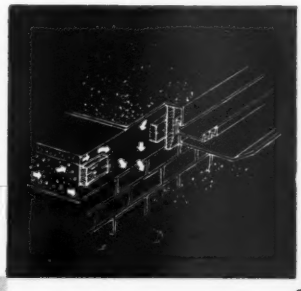

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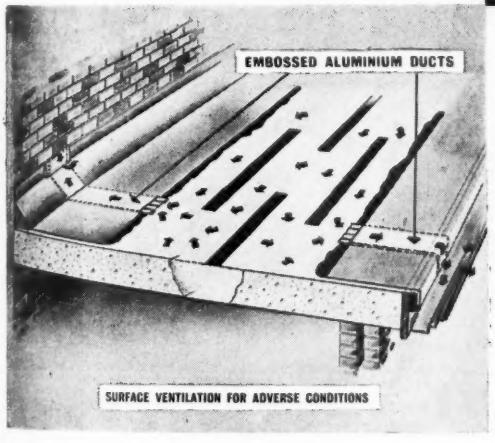
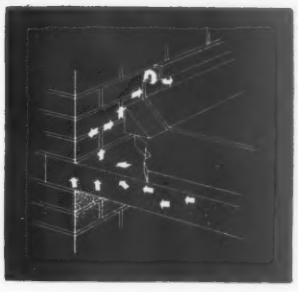


Typical detail is shown but others are available to suit design and advice will be given on request.



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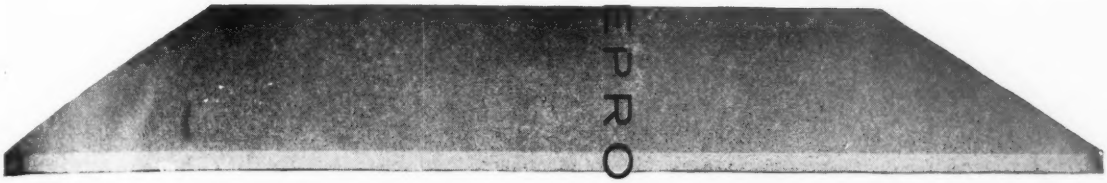

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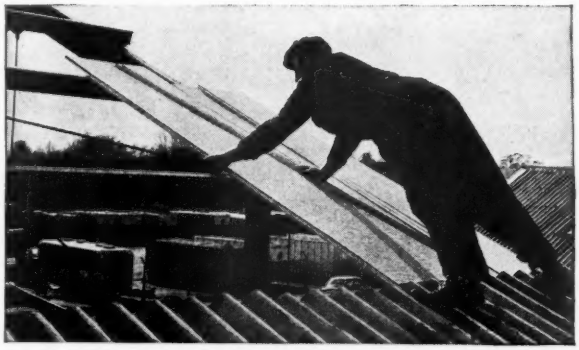

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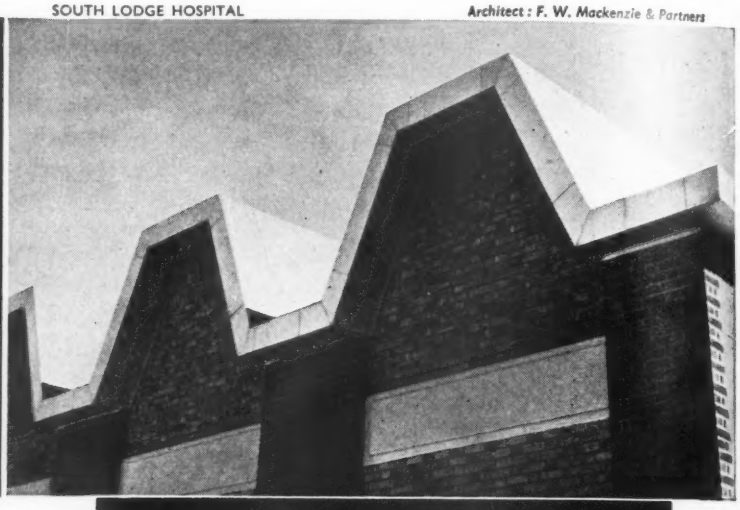

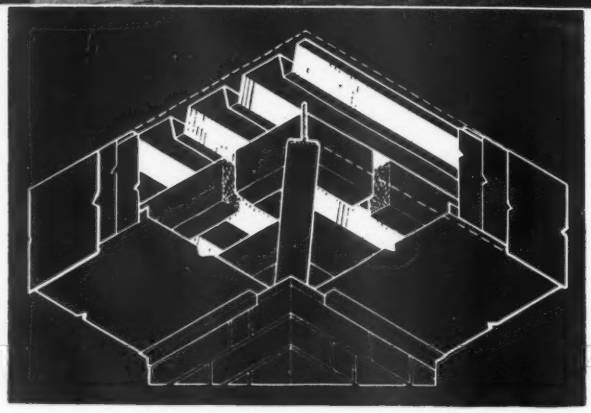

* This was achieved by the introduction of timber spacers below the oversailing roof deck units, to which the aluminium soffit was fixed, and the provision of an aluminium angle to bridge the gap between decking and soffit at the oversail line to waterproof the detail and to provide backing for the aluminium fascia.

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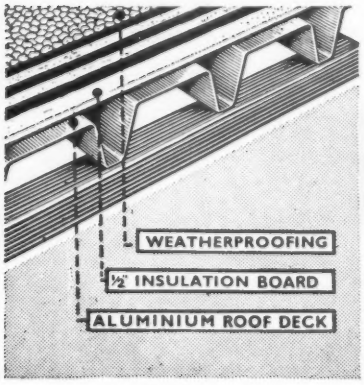

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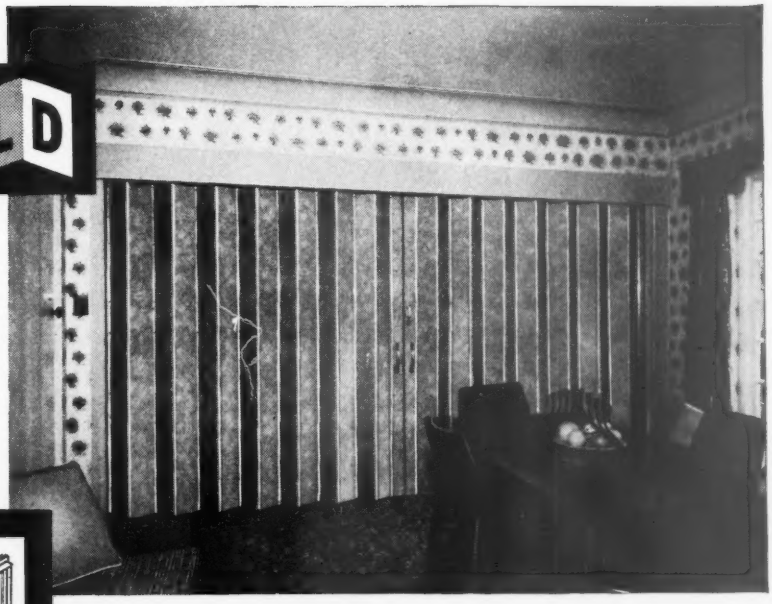

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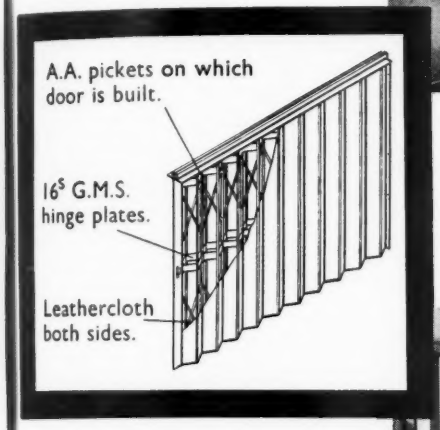

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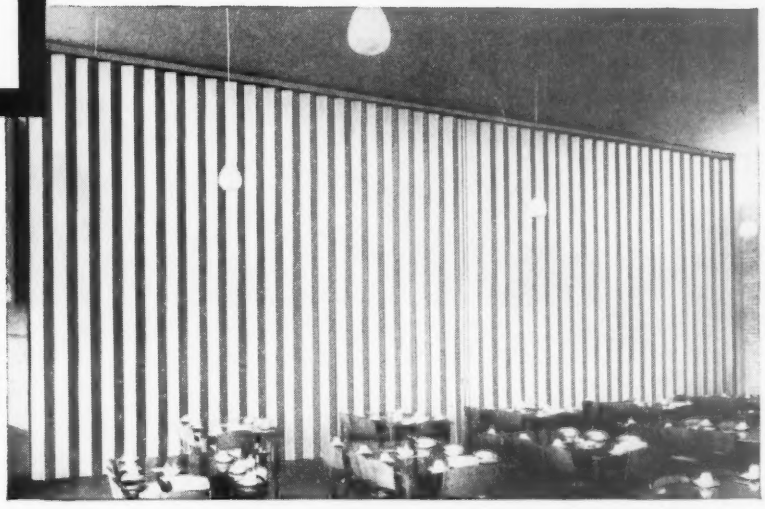

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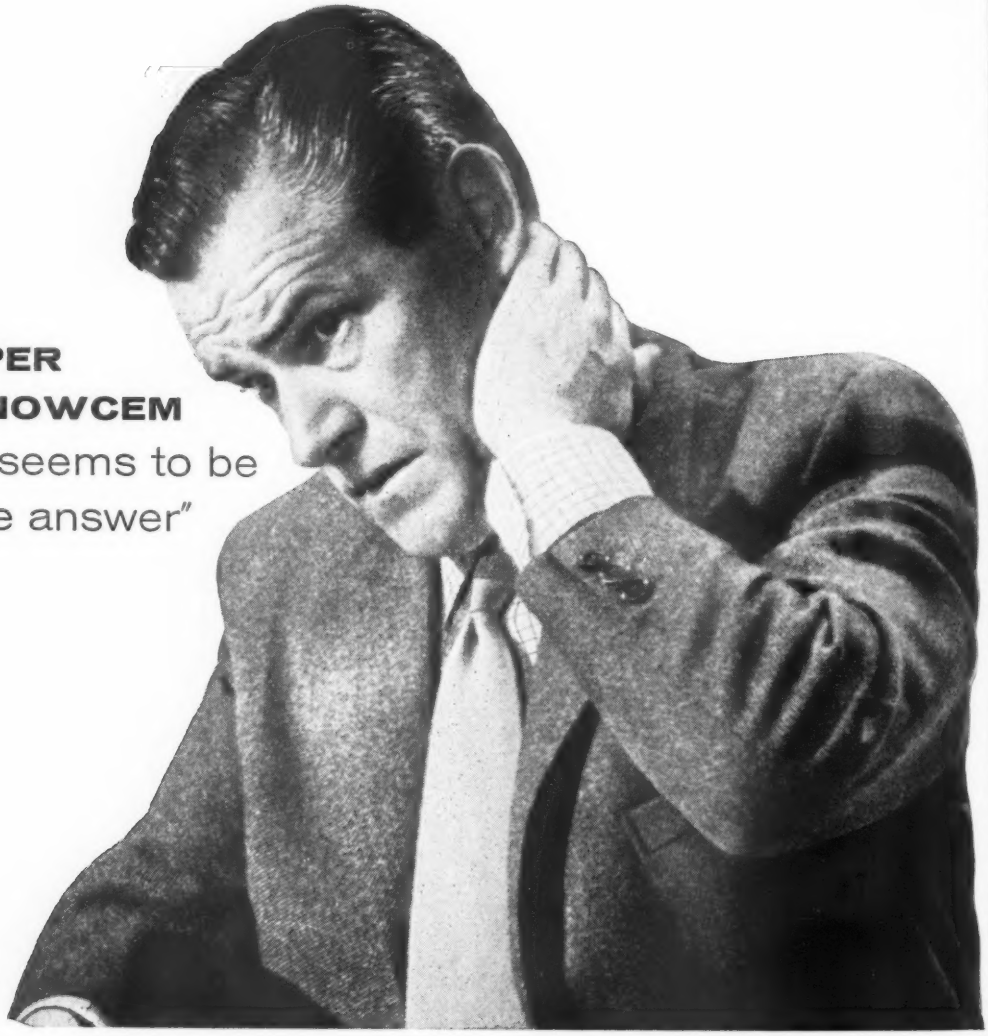

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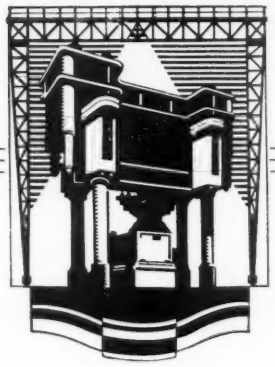

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N.C.B. Housewarming Plan—offers a personal loan to cover the cost of a central heating installation. Low interest—five years to pay—tax relief.

Lowest maintenance costs. Solid fuel systems cost practically nothing to maintain. But with other fuels, skilled maintenance is necessary and this can cost from £5 to £15 per year—another 2/- to 6/- a week on the running cost.

Compare the costs. These are typical weekly costs, averaged over the year, for centrally heating a three-bedroomed house or bungalow—and hot water summer and winter. Look how much cheaper solid fuel is.

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** plus 2/- to 6/- a week maintenance cost.*

Write for FREE booklet on Central Heating and list of other technical publications to the Coal Utilisation Council, 3 Upper Belgrave Street, London, SW1. Also available 'Central Heating for Houses', a complete 120-page illustrated survey of all the various systems available, from the open-fire-and-back-boiler to the small pipe system. Copies 2/6d each.

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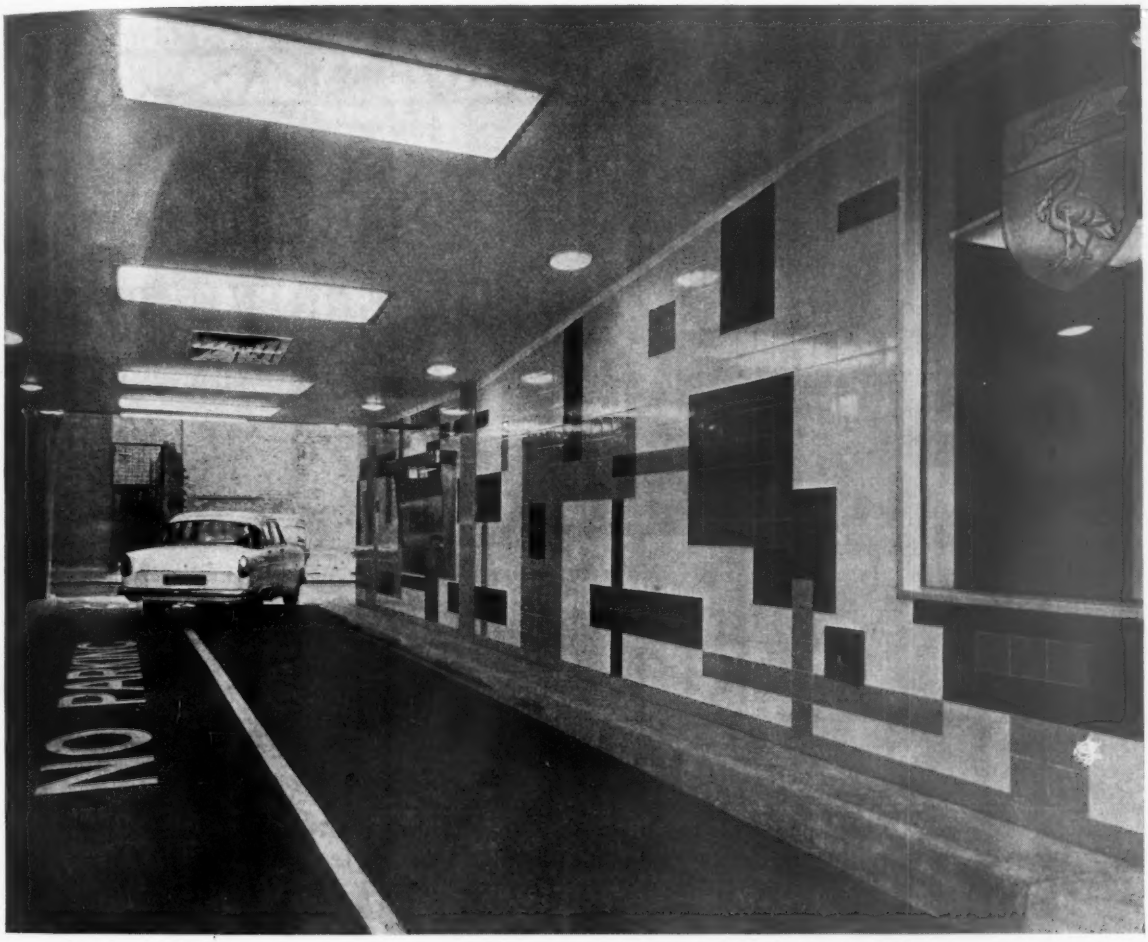

Architects: Pick, Everard, Keay & Gimson, Leicester.

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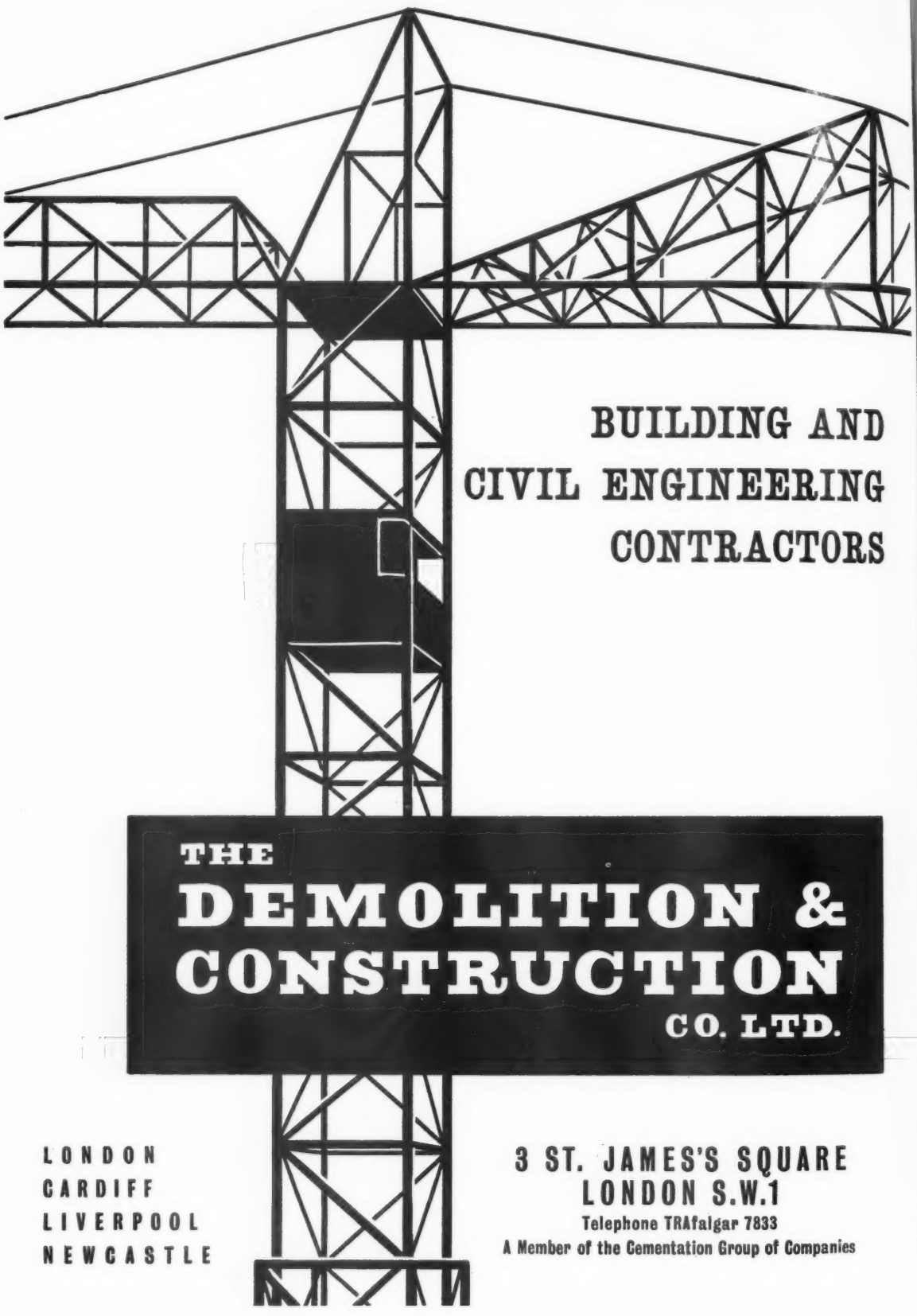

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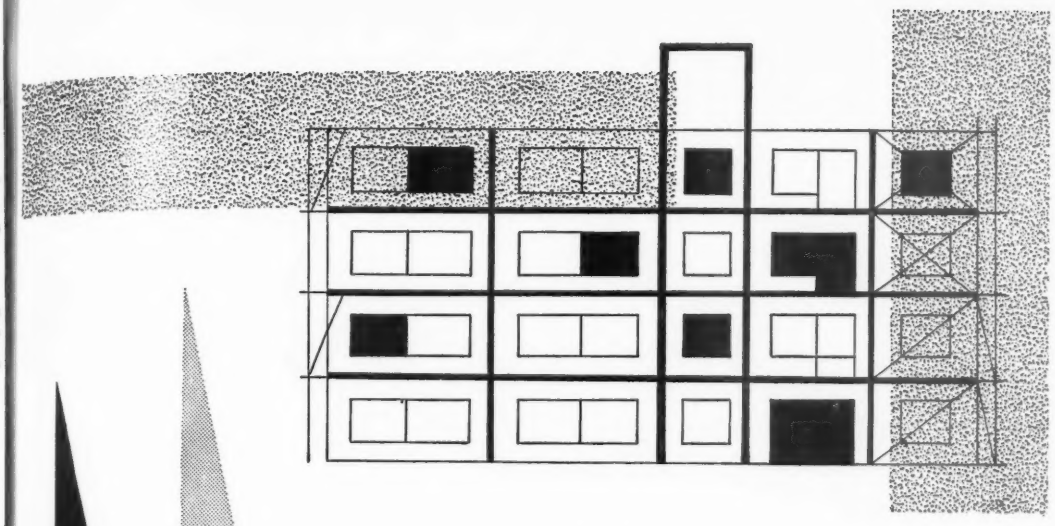

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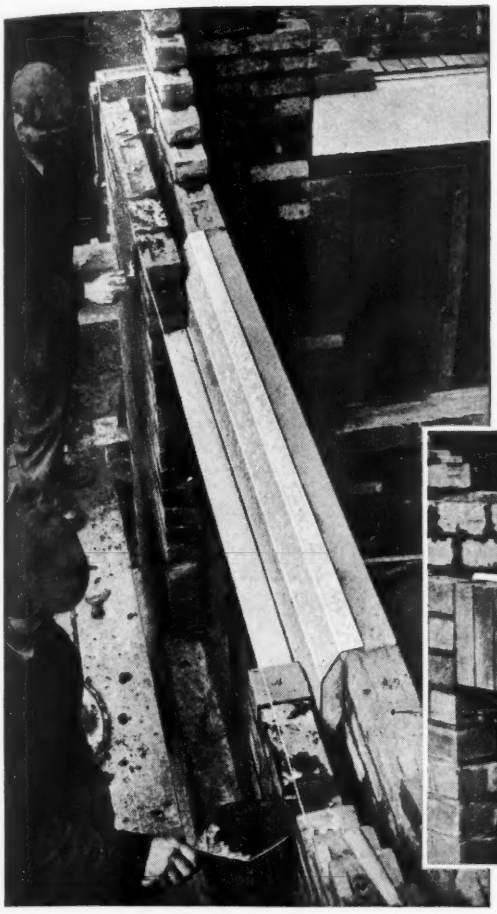
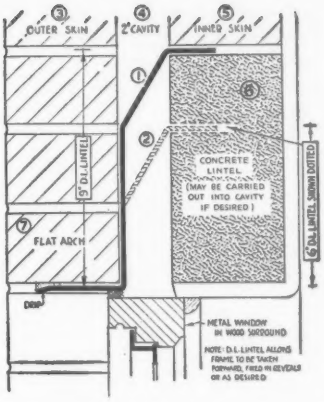


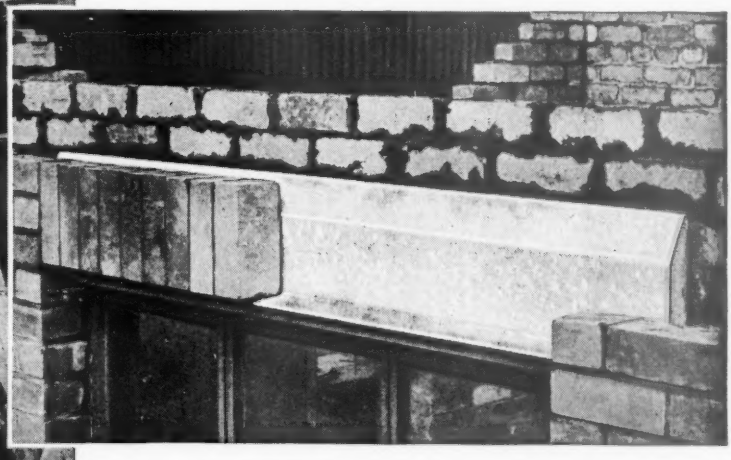
SECTION SHOWING TYPICAL DETAIL

(1) 9 in. Dorman Long Lintel
(2) 6 in. Dorman Long Lintel (shown dotted)
(3) Outer skin
(4) Cavity
(5) Inner skin
(6) Inside concrete lintel (carried out into cavity if so desired)
(7) Flat arch

The wide 'turn-in' of the Dorman Long Lintel allows the cavity to be varied from 2 in. to 2¾ in. in width.

Patent No. 694214


3 OUTER SKIN
4 2" CAVITY
5 INNER SKIN
1
6
2
9" D.L. LINTEL
CONCRETE LINTEL (MAY BE CARRIED OUT INTO CAVITY IF DESIRED)
6" D.L. LINTEL SHOWN DOTTED
7 FLAT ARCH
METAL WINDOW IN WOOD SURROUND
NOTE: D.L. LINTEL ALLOWS FRAME TO BE TAKEN FORWARD, FIXED IN REVEALS OR AS DESIRED



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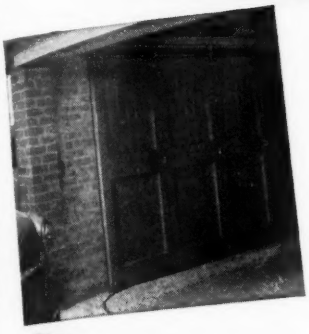

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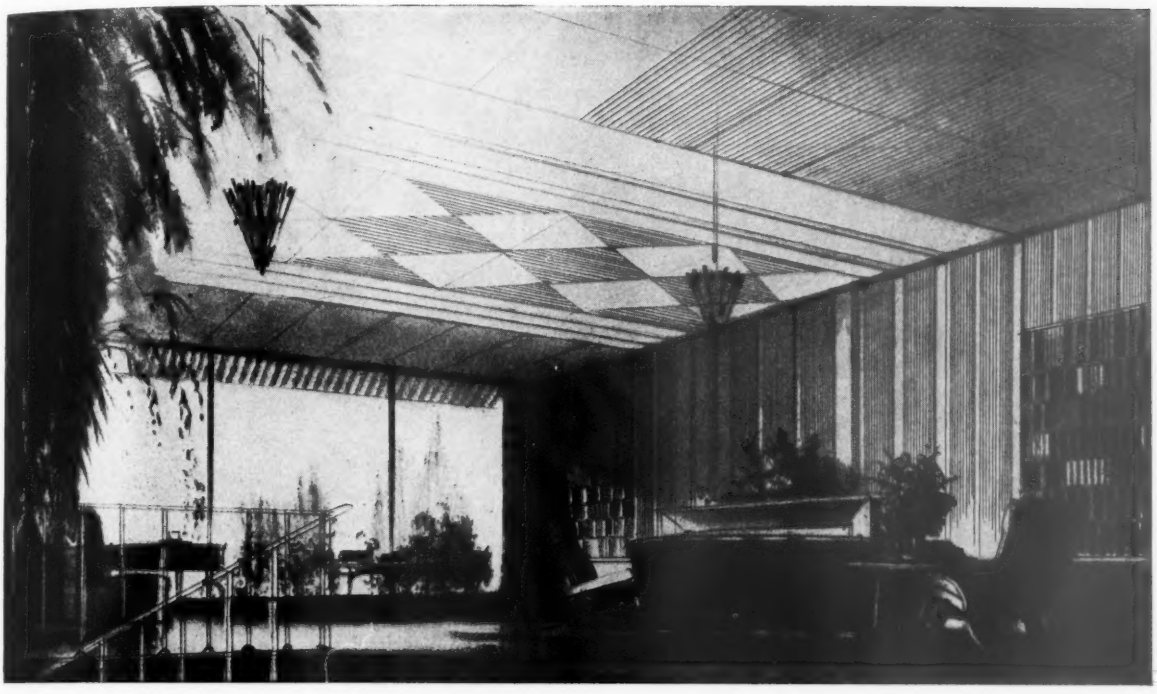

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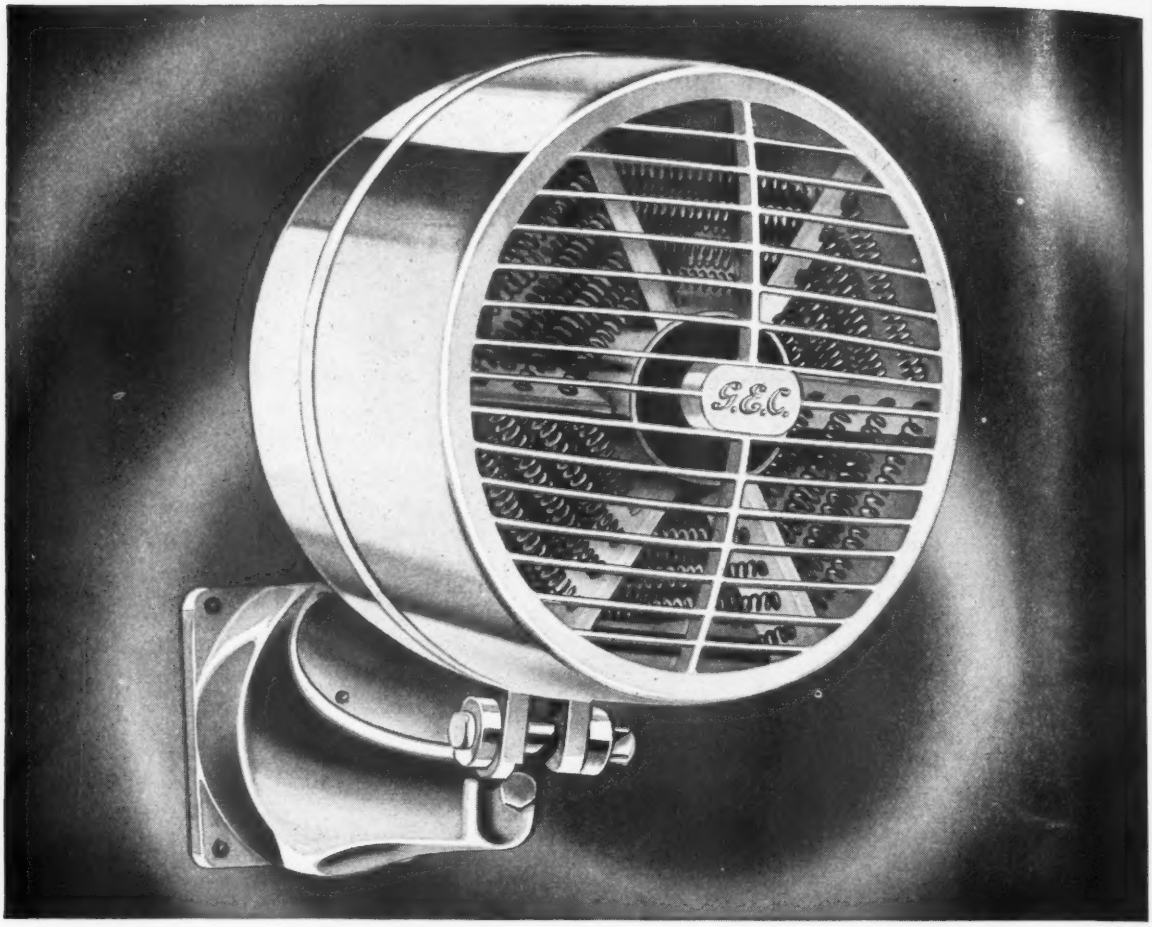

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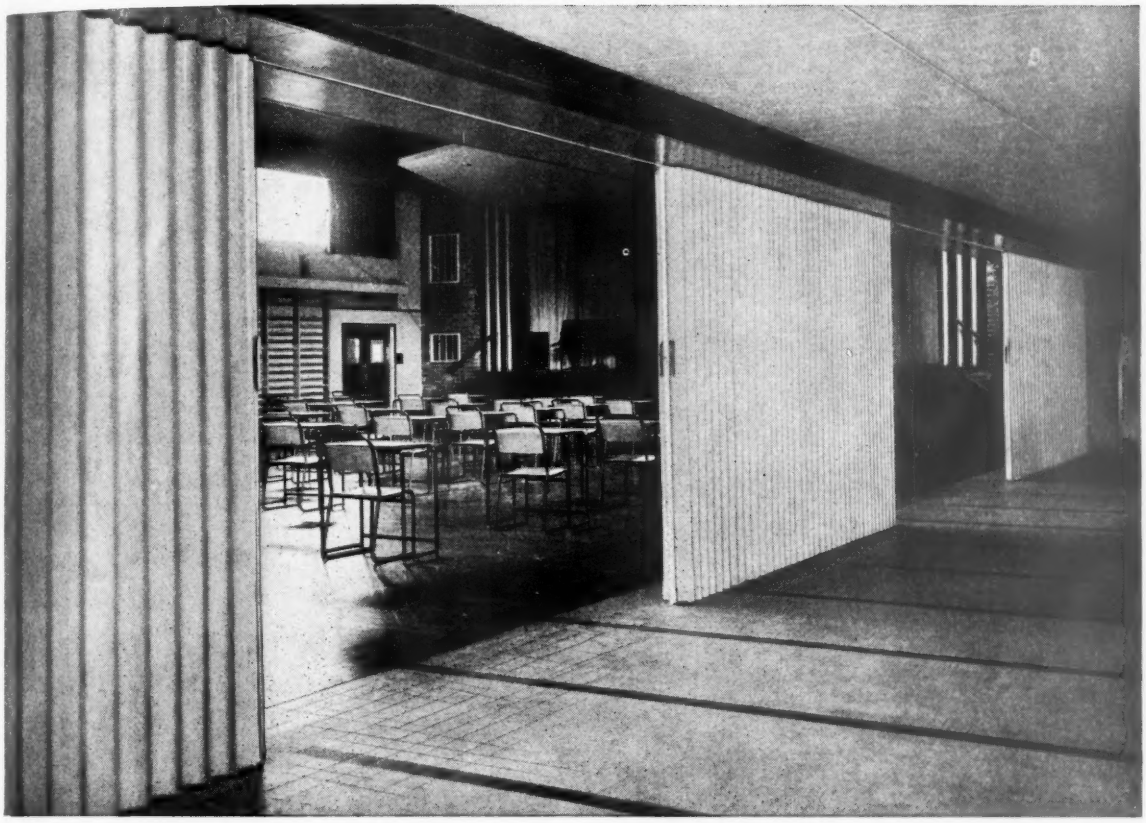

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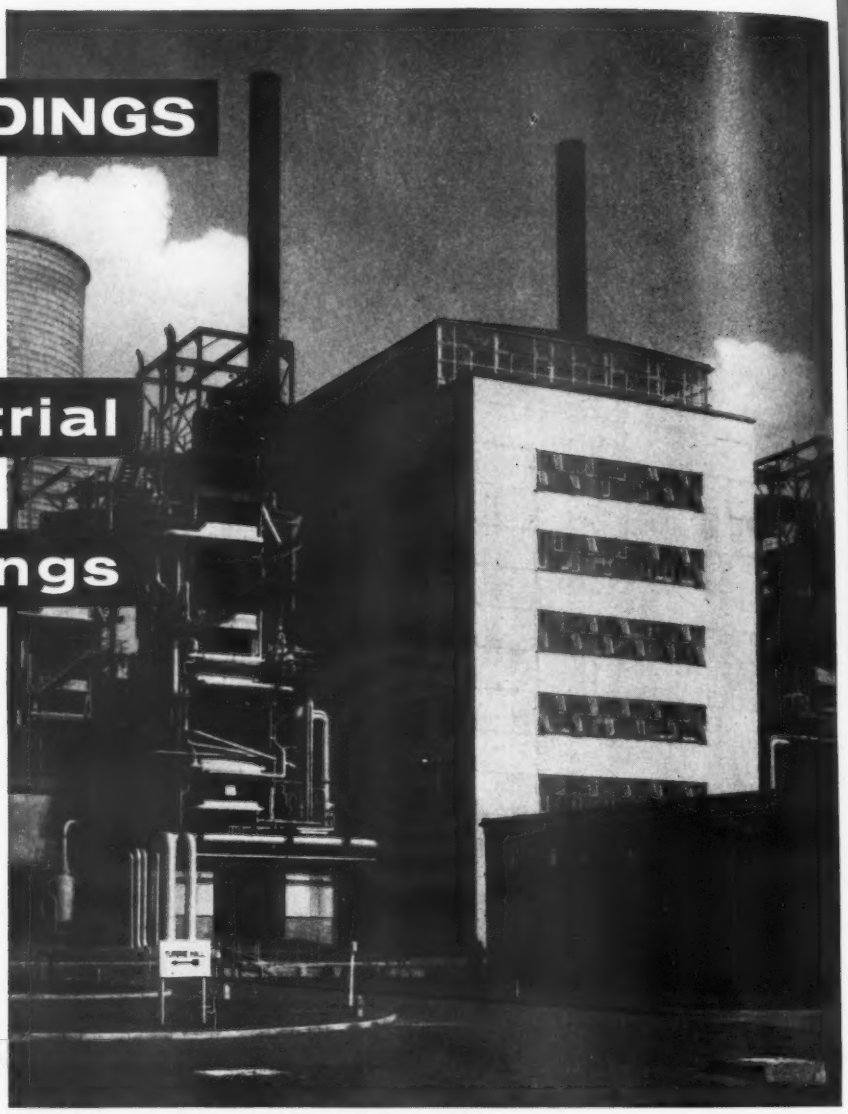

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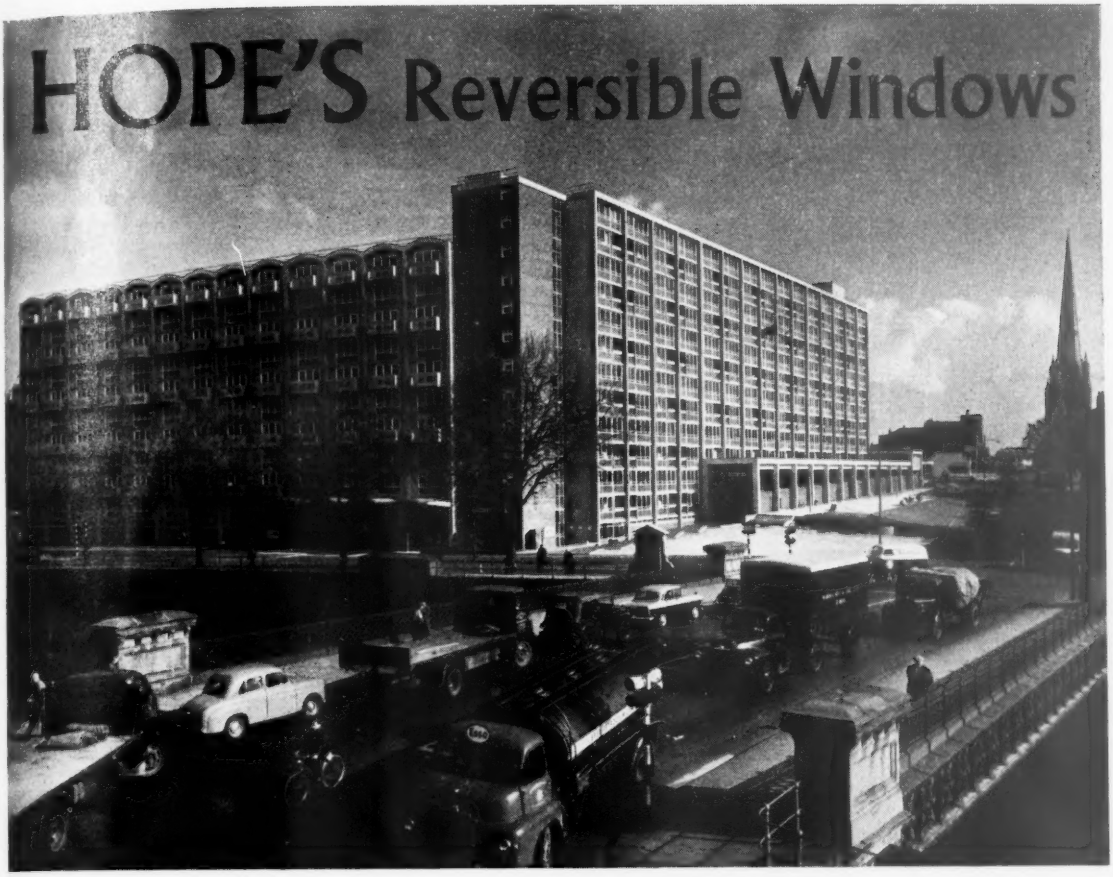

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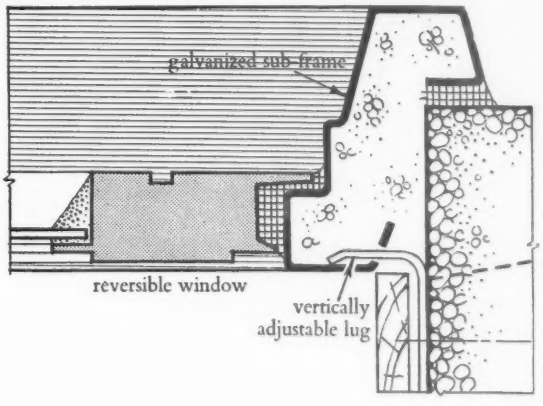
Albert H. Clarke, F.R.I.B.A., Bristol City Architect *John Laing & Son Ltd., Building & Civil Engineering Contractors*

1348 Reversible Windows are here ranged in groups of 2 and 3 in galvanized steel sub-frames which start at floor level and contain Georgian wired glass spandrel panels. The detail alongside shows how the sub-frame completely frames and weathers the concrete opening and at the same time absorbs any variation in opening sizes. The casements turn completely through 180° to permit easy cleaning and repainting from inside the flats.



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News from Hull

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A BATHROOM WITH EVERY BEDROOM AT THE SKYWAY HOTEL

Vitreous China used

After having travelled half-way round the world the guests at the new Skyway Hotel near London Airport will find it easy to have a refreshing bath within minutes of booking in. Every bedroom suite has its own bathroom – planners considered this to be an essential feature of an airport hotel. The bathrooms are small, compactly designed and practical. They are easy and quick to clean – with a high turnover of guests this is vitally important – the appliances used are durable and will not have to be replaced for a great many years. The baths, with shower fitments, are 'Standard Master Classic', modern in design and coated with high quality porcelain enamel. The wash-basins and low level closet suites are also 'Standard' products made from vitreous china. Vitreous china has a higher resistance to harsh treatment and fracture than other ware and is recognised by most Public Health Authorities to be more hygenic. This is because vitreous china is fired at a much higher temperature. As a result it is a dense and non-absorbent material which does not depend upon its glaze to make it watertight. As it is non-porous and non-absorbent it is impossible for germs to lodge and breed in it.

A Skyway Hotel Bathroom. Tiled walls and floor, 'Standard' bathroom equipment. Long lasting, attractive, easy to keep clean.

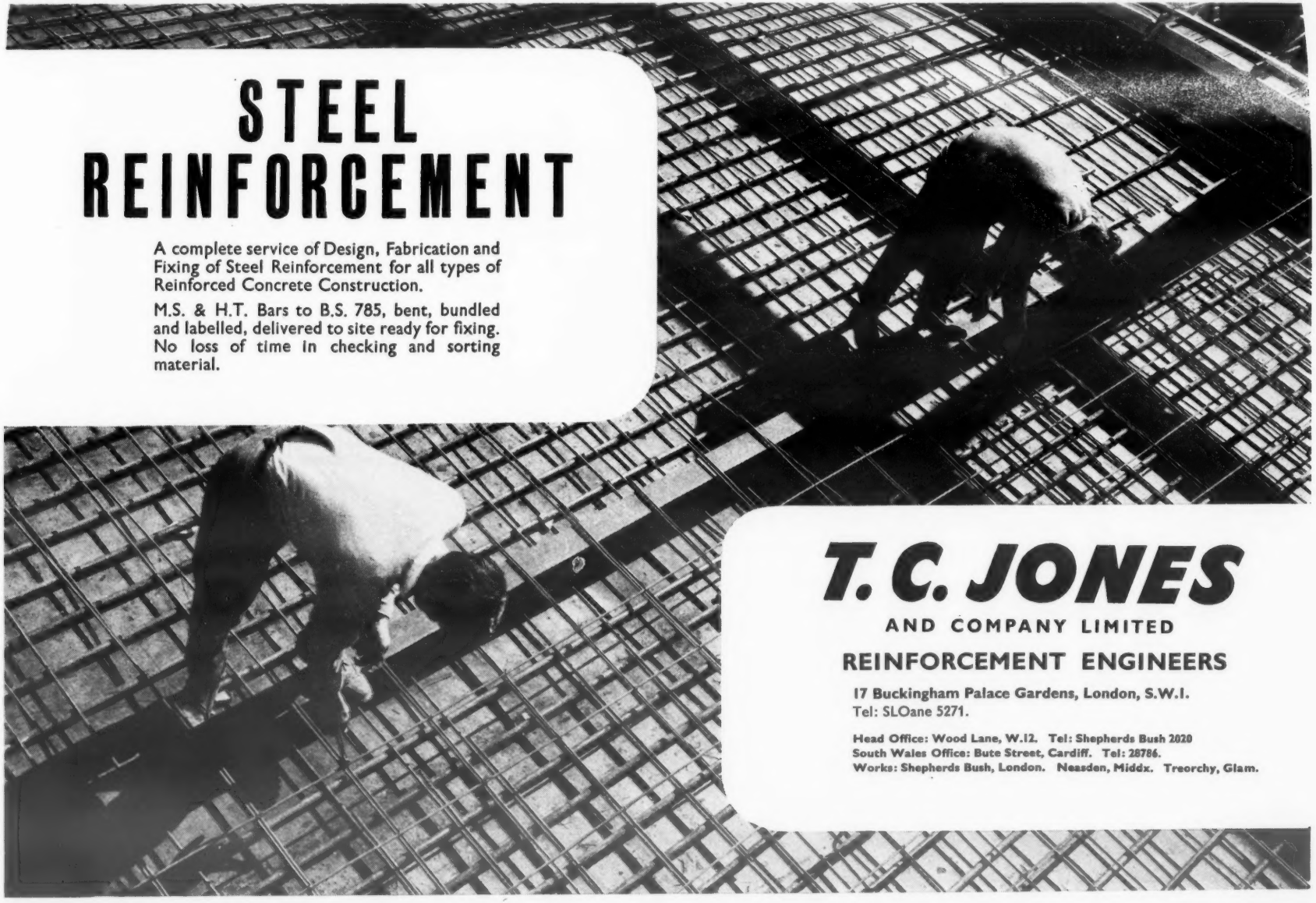
NEW BATHROOM SUITE FOR LOW-COST HOUSING

A new economical bathroom suite has been designed by 'Ideal-Standard' especially for the demands of low-cost housing schemes. This suite, called the 'Trimline', consists of a wash-basin, which is available on cast-iron wall brackets or a pedestal (as illustrated), and a wash-down closet coupled to a low-level cistern. It is distinguished by a high quality of design not common in low-cost sanitary appliances. Made from non-porous vitreous china it is strong and permanently hygienic and has all the advantages of more expensive luxury suites. Many local authorities are already using vitreous china equipment for new dwellings – the 'Trimline' suite has figured prominently in these developments.

Clean lines, attractive overall appearance, low cost, vitreous china hygiene and durability are features of this 'Trimline' wash-basin and closet.

ARCHITECTS DESIGN PACKAGED BATHROOM

Several well-known architects and interior designers have been commissioned by 'Standard' to design bathrooms for a range of representative modern houses. The bathrooms – plans of which will be available to the general public, builders and architects – are complete in every detail. Wallpapers, paints, carpeting, linoleum, lighting, heating, accessories and appliances are all specified in the plans and alternative colour schemes are suggested. Helen Challen, ARIBA, MSIA, who was voted as having designed the most interesting and attractive living-room in last year's Ideal Home small house project, and Robert Heritage, DES.RCA, MSIA, who won a Design Centre award for furniture and submitted a successful design in the Ideal Home competition, are among the designers of these bathrooms. The designers had to bear in mind that the overall cost was to be kept within given limits, and that the plans would possibly have to be adapted. Despite these difficulties a high standard of décor and design has been obtained at a realistic outlay. The plans will soon be available from Ideal Boilers and Radiators Limited, Ideal Works, Hull, on request.



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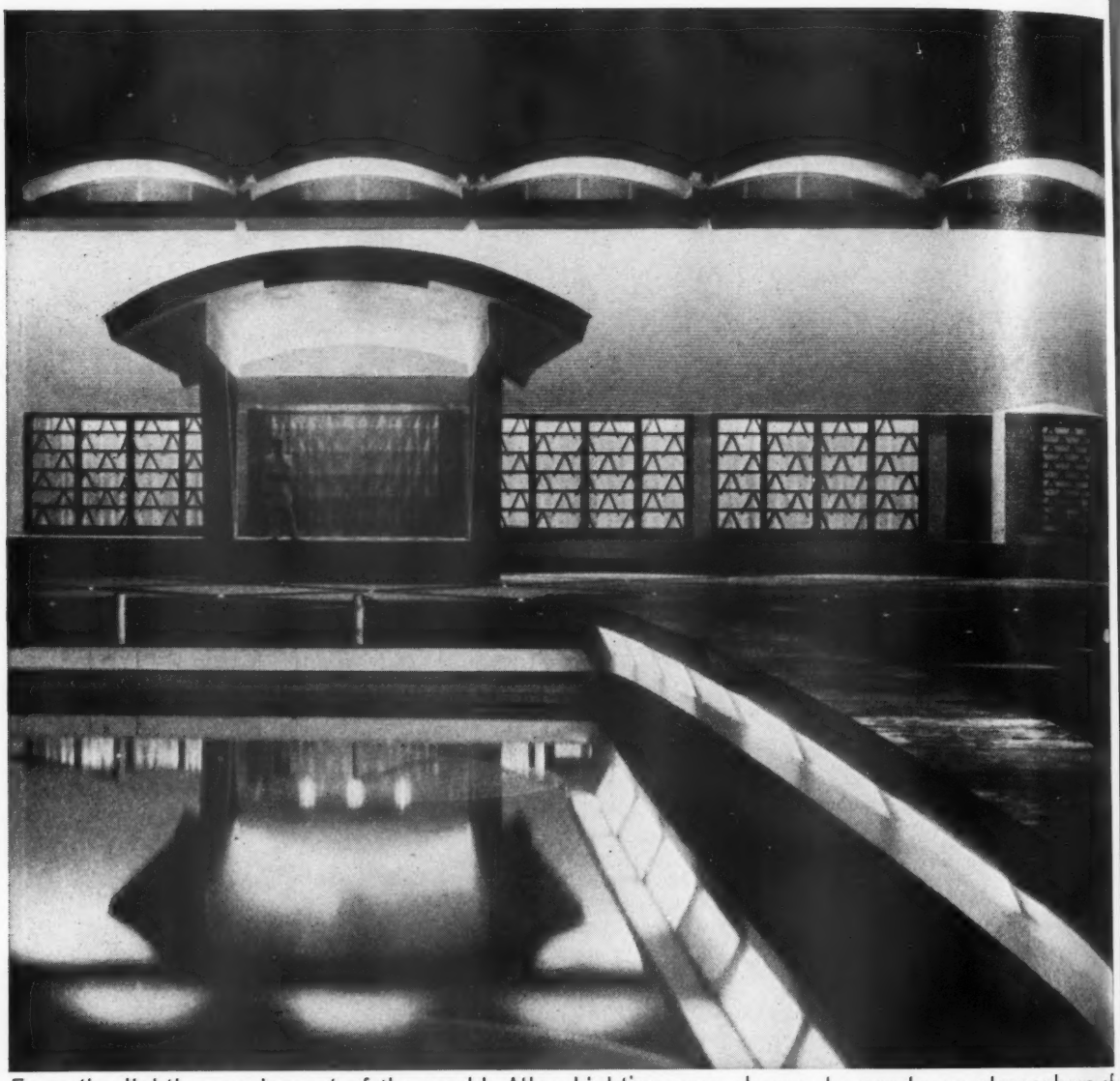

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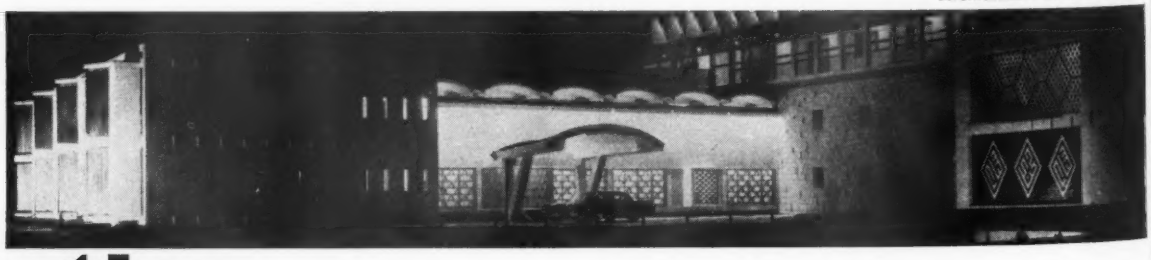
A PALACE IN THE PERSIAN GULF

Architects: Farmer and Dark



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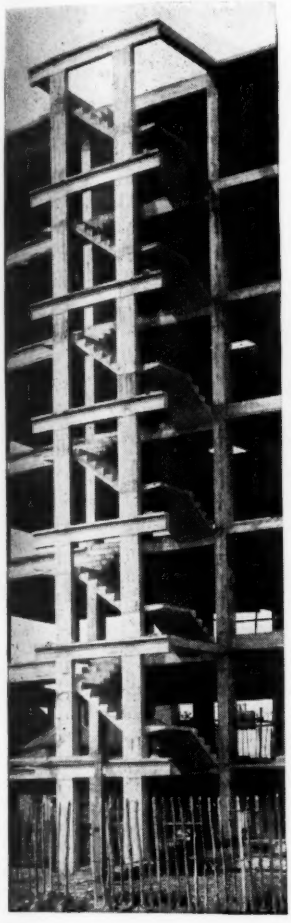

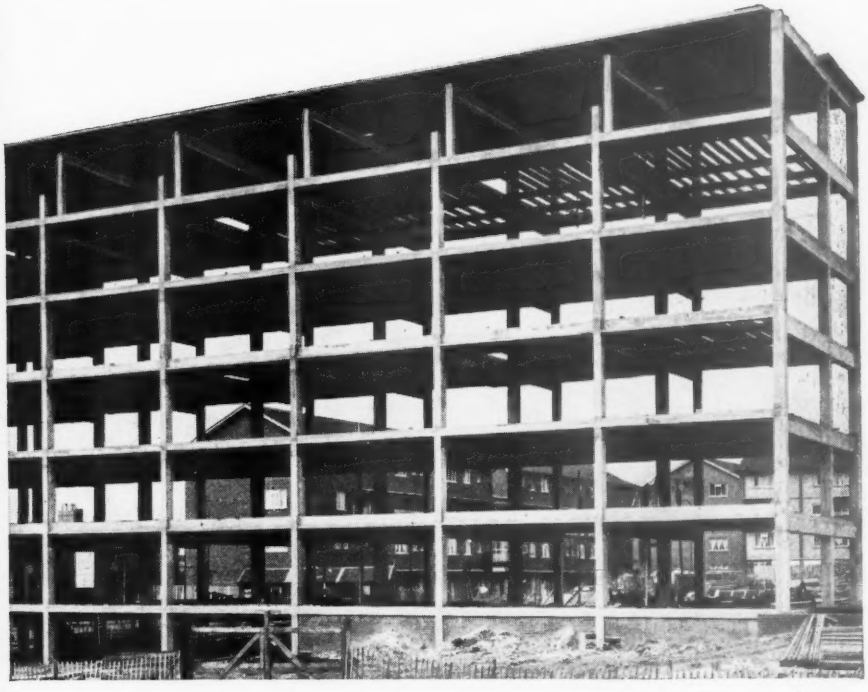

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Architect: A. G. Sheppard Fidler, M.A., B.ARCH., F.R.I.B.A., A.M.T.P.I., Birmingham City Architect.

Consulting Engineers: Septimus Willis, M.I.C.E., M.I.STRUCT.E., A.M.INST.W., M.CONS.E., and Associates.

General Contractors: City of Birmingham Direct Labour Building Department

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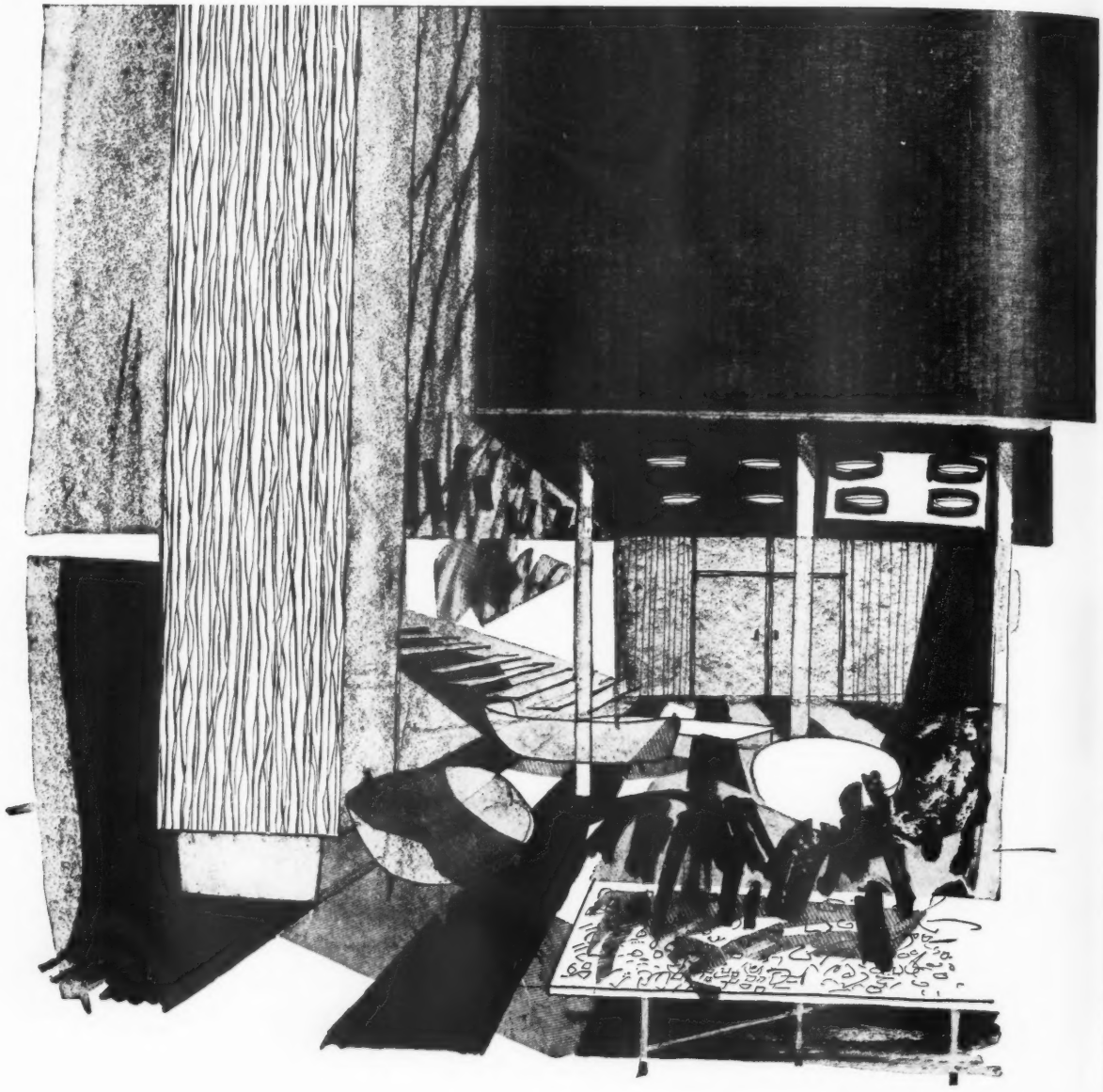

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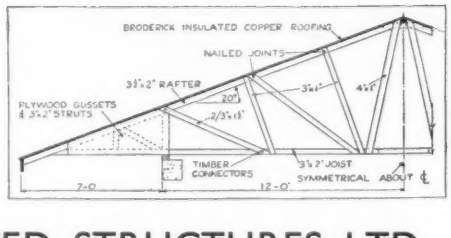

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Technical Information Service

The aim of the RIBA Technical Information Service is to provide architects with information on questions of management, planning and technology in the most suitable and concise form for direct application at any stage of the building process. It is hoped that this will not only help architects to fulfil their many responsibilities as members of the profession, but also contribute towards a rational approach being made to the complex problems of building today. Much energy and a great deal of time is spent in finding information. Although this is sufficient in quantity, it is difficult to say that it is adequate in terms of quality. It is this discrepancy that the RIBA Technical Information Service will attempt to fill through its publications. The first of these, the *RIBA Hospitals Course Handbook*, will be available early next month.

The main emphasis of these publications will be laid on presenting information which is transitory in nature. It has been decided to use the term RIBA Notes for all the abstracts, bulletins and digests that will come under this heading. Often RIBA Notes will be leaflets of an intentionally expendable character. They are for use when decisions have to be made, usually at the drawing-board level. As the information they contain becomes superseded they should be replaced with fresh material. It will also occur that a series of RIBA Notes will be produced individually and later gathered together into a handbook or manual for ease of reference when the information indicates that it is likely to remain valid for a long period.

Comments and criticisms from users will be encouraged and it is desired that the RIBA Notes should become a genuine basis for the exchange of professional experience by members. Much of the material for these publications should come from members themselves and suggestions for subjects to be dealt with will be welcomed. The value of such an information service is dependent upon the extent to which it fulfils definite needs within the profession and the extent to which these needs are made known.

It is intended that the format and presentation of the RIBA Technical Information Service publications, whether monographs or information sheets, should be standardised so that material is always to be found in a recognisable sequence and aided by a clear typographic structure. All publications will be A4 in size in accordance with the recommendations of the Institute for technical and trade literature. The combined SfB/UDC system will be used for classification.

One of the problems to be faced is that of presenting information clearly, in such a manner that it will be understood without any difficulty. Literary English is not always sufficient in this respect. The visual impact of information that is communicated by more direct means can be stronger. Photographs, drawings, diagrams, charts, graphs, tables and text will all be used, depending upon the particular requirements of the publication concerned. Sometimes the use of text will be cut to the minimum where the need to read a page of data effectively makes the use of diagrams and graphic symbols more logical.

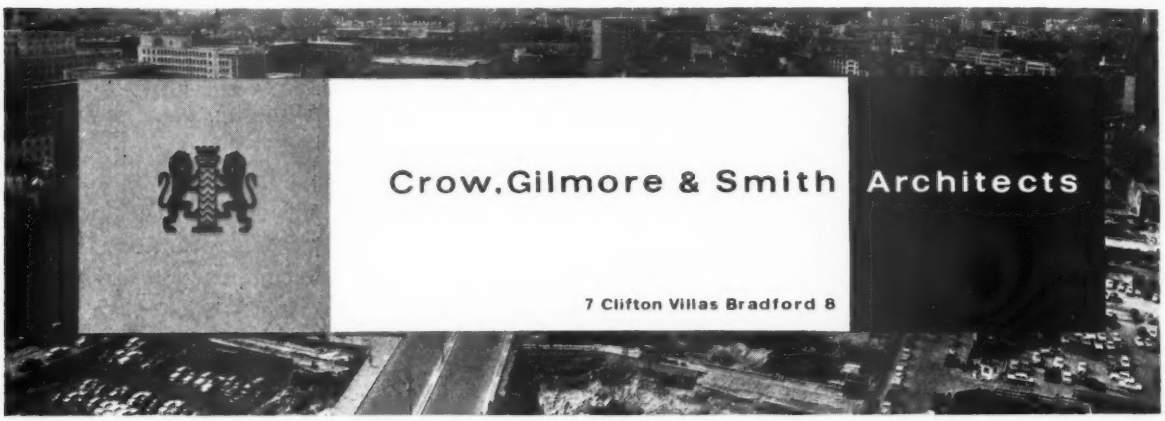
The following publications are some of those included in the initial programme of the RIBA Technical Information Service for the 1960–61 session.

The *RIBA Hospitals Course Handbook* comprises 22 of the papers given at the Course in July 1960 for new Hospitals Architects. *The SfB/UDC Filing Manual* will be the authoritative English language edition

describing the systems of classification and their application, together with the necessary tables and alphabetical subject index. *The Index of Sources of Technical Information* will contain references both to printed sources such as standards, codes of practice, bulletins, digests, etc., and eventually also to the organisations providing such information. *The Office Management Handbook* will be made up from a series of RIBA Notes, the material for which will be submitted through the Management Committee. An RIBA Note is being prepared on *Car-Parks and their Planning* and will endeavour to abstract the essential requirements concerning the planning, constructional, economic and legal aspects of parking garage design. A series of RIBA Notes on *Anthropometric Data* with particular reference to the architectural implications of certain ranges of human dimensions is being planned. One is also being produced on the factors governing the design of the *Cores of Multi-storey Office Blocks*, both in terms of human traffic and services. Apart from these publications it is hoped to prepare RIBA Notes during this Session on *Heating Systems*, *Refuse Disposal*, *Cost Planning*, *Costs of Buildings in Use* and *Techniques of Analysing User Requirements*.

The intention of the RIBA Technical Information Service is that it shall operate on a financially self-supporting basis. It should then be possible after an initial three-year period of building up the Service through its publications to broaden its scope to include an inquiry service by letter, telephone and personal visit, which for the time being is beyond its resources.

An order-form for the *RIBA Hospitals Course Handbook* is inserted in this issue. Members who participated in the Course will receive their free copy by post.



Prototype of the new RIBA standard signboard. (*Note:* It is suspended by will-power for temporary visual effect; the background is not intended to suggest the appropriate altitude.)

RIBA Topics

New RIBA Standard Signboards

As announced in the September JOURNAL there will in future be a large standard board measuring 8 ft. by 2 ft. and a smaller board measuring 4 ft. by 1 ft., both to the new design which is in black, white, and grey. The size of the boards has, to some extent, been influenced by the material from which they are made. The size selected permits economical cutting from the standard sheets and consequently a lower price than would otherwise be the case.

The large board is intended for display on buildings under construction where the use of the small board would be inappropriate or difficult to read. The small board is intended for the smaller type of job but the decision as to which board to use must of course be left to the discretion of members in the light of the particular circumstances.

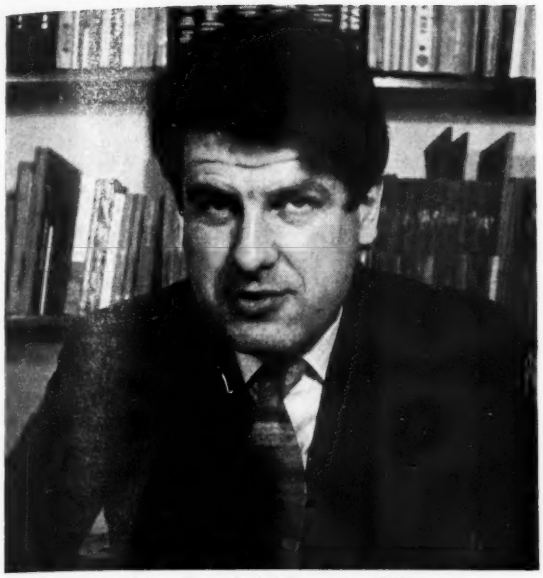
Orders can now be placed for the new boards and a list of manufacturers together with their prices can be obtained on request from the RIBA.

The Council have approved a recommendation that in future all standard signboards must be obtained from one or other of the approved manufacturers. This is in order to avoid discrepancies in the layout, typography, badge design, and general quality of the standard boards which has sometimes been apparent when the work has been undertaken by local signwriters.

No more boards to the old design will in future be produced but members may continue to use the old boards as long as they are serviceable. Members, if they so wish, can of course use boards of their own design but the RIBA badge may only be used on the standard board approved by the Council which may not be altered as to colour or design in any way.

Milan Triennale Highest Award

The International Jury of the Milan Triennale design exhibition has awarded the Gran Premio Con Menzione Speciale – the highest award – to the United Kingdom primary school



Mr Maurice Goldring, Technical Information Officer, who describes the RIBA Technical Information Service in this month's leader

designed by the Nottinghamshire County Council Architect's Department (County Architect: Mr W. D. Lacey [*A*]) using the system of construction originated by Mr Donald Gibson, CBE [*F*], when he was County Architect, and developed by the Consortium of Local Authorities Schools Programme – CLASP.

The honour is particularly encouraging as this is the first time there has been a British exhibit at the Triennale. Congratulations to the Ministry of Education and all concerned.

Sixth IUA Congress

At the time of going to press, applications for registration had been received by the Congress office from 18 different countries. More than half the registrations are from this country and the two next largest numbers are from USA and Luxemburg.

Architects who did not register before 31 December but still intend to do so are reminded that there is now an additional late fee of £2 chargeable for registration.

The Congress will end on 7 July with a Gala Evening at the RIBA at which 2,000 people are expected. The provisional arrangements open with the Reception from 9–10 during which the Band of the Welsh Guards will play. There will be ballroom dancing in the Florence Hall, and a jazz band on the sixth floor, relayed to the fourth floor terrace.

Films will be shown in the Jarvis Hall and there is to be an exhibition in the Library. In addition to all these entertainments, space will be found for three buffet-bars. Information and news about the Congress will be given each month until it opens in July.

RIAI – Triennial Gold Medal, 1956–58

The Council of the Royal Institute of the Architects of Ireland has awarded their Triennial Gold Medal for the period 1 January 1956 to 31 December 1958 to Mr Piaras Mac Cionnaith, BARCH, FRIAI, for St Raphael's College of Physical Education, Dominican Convent, Sion Hill, Blackrock, County Dublin. A suitable tablet will be affixed to this building.

Mr Piaras Beaumont, BARCH, was highly commended for the Fish Processing Station, Galway, of An Bord Iascaigh Mhara.

Public Relations in Berlin

Elsewhere in this issue is a well-considered contribution by Mr D. G. Thornley [*A*] on Schools of Architecture in West Germany.

If we have something to learn from them in education, it appears we are ahead of the Germans in public relations.

In a letter to Malcolm MacEwen, Dr O. H. Koenigsberger, Director of the Department of Tropical Architecture at the Architectural Association School, quotes the following passage from a recent circular (No. 11/60) of the *Architekten – und Ingenieur – Verein zu Berlin* which, he says, is more or less the German equivalent of the RIBA.

> 'We consider it appropriate that our Institute should publish in Berlin newspapers contributions which will clarify aspects of future Architectural activities.
>
> 'The subjects should include among others, the decline of public housing activities, the over saturation of Berlin with office buildings, neglect of factory buildings, the prospects of urban renewal and slum clearance, etc.'

'Obviously', writes Dr Koenigsberger, 'you are a good deal ahead of your German colleagues who appear to be battling with problems not unsimilar to those which worry architects in this country.'

SPUR Report 1960

In their report for 1960 the Society for the Promotion of Urban Renewal assesses the situation in the following terms: 'In little more than a century the quality of our urban life has tragically deteriorated. This deterioration is now gathering momentum, and will, we believe, disintegrate our cities unless immediate action is taken.' The following points are made in the report 'A Framework for Urban Renewal':

More work is needed on density standards, in particular to arrive at an overall town density appropriate to social conditions in the next generation.

Surveys of existing land should be refined so as to cover multiple use and point out more clearly where land is being wasted.

A national policy of decentralisation is still essential and must go hand in hand with urban renewal.

Compact 'New Towns within Cities' should be created within outer suburban areas.

A radical reappraisal of urban transport techniques and research on the needs of the pedestrian are required.

High density is advocated in proximity to public transport stations.

Research is needed on the traffic and other planning problems of medium-sized towns.

Units of redevelopment should be as large as possible and new land for housing should only be released in step with redevelopment, while no single unit of redevelopment should be treated as an economic island.

Land uses should be more mixed, i.e. the introduction of living accommodation into the centre, and some local industry into dormitories, is required.

The main conclusion of the report is that the next step should be the setting up of an independent National Urban Renewal Research and Development Agency – NURRDA – whose function would be:

To coordinate existing research.

To promote new lines of investigation.

To comment on research results.

In these ways a serious attempt would be made to prevent the wastage of skills and duplication of effort, and to link up the contributions of specialists.

However, in addition to national action, local self-help is considered necessary, and SPUR suggests this should take the form initially of a Reconstruction Committee of the local authority to make the necessary survey and advise the Council on a phased reconstruction programme.

SPUR is a group affiliated to the Housing Centre Trust with its headquarters at 13 Suffolk Street, London, SW1.

Mr Gontran Goulden, Deputy Director of The Building Centre who is giving part time services as Director IUA Congress

Council Business

The Council met on 13 December with the President, Sir William Holford, in the Chair.

The Secretary's Report

IUA Congress. The Secretary informed the Council that now that the planning of business and social events for the Congress next July was virtually complete, a controller was required to conduct the operation and ensure that everything went according to plan. Senior members of the RIBA staff who might have taken this job on were already heavily committed, and the solution had been found through the generosity of the Building Centre who had agreed to second Mr Gontran Goulden [*F*] as Director of the Congress as from 1 January 1961. Mr Goulden is already vice-chairman of the Congress Organising Committee and has been intimately involved in all decisions taken so far.

Relations with the House of Commons. The RIBA's direct representation in the Commons is nil and in the Lords two. There are many problems both current and future in which a sympathetic hearing initially and strong support ultimately, in the House of Commons, would be of value. A start in this direction was made in November when the President RIBA addressed a group of some 135 Conservatives and later of some 15 Labour MPs, at the House. Between these two meetings, at a dinner at the House, there was an informal discussion between the President and six architects, and nine influential MPs from both parties.

Further dinners of this kind are to be arranged from time to time.

Survey of Architects' Offices. In addition to the names of the team carrying out the Survey of Architects' offices given in the December JOURNAL, Mr A. G. Derbyshire, MA, AADIPL. [*A*], Assistant City Architect, Sheffield, and a member of the Council, is to serve on a part-time basis.

Pilkington Committee on Sound and Television Broadcasting. Written evidence was submitted to the Committee before the end of the year, and oral evidence is being heard later. The Sound Broadcasting and TV Sub-Committee of the Public Relations Committee are preparing a case for more programmes on architecture, in particular the possible use of new TV channels for programmes directed at more local and specialised audiences.

Building Regulations. The Government's Health Bill, published last November, includes provisions for the replacement, by centrally made regulations, of the building bye-laws at present made by borough, urban and rural district councils. This is a measure that the RIBA has been advocating for some years, but the Technical Standards Committee who have been considering the rationalisation of building control, recognises that this is only a beginning.

As almost every ministry is responsible for some regulations affecting building, co-ordination of building controls is urgently needed. It may be that the Advisory Council proposed in the Bill will provide the necessary link with the other Ministries for this purpose.

The Committee hope to put before the Council an outline policy on building control before the end of the present session. Meanwhile, they are considering detailed proposals for the regulations.

They would welcome comments from Allied Societies on the Model Bye-laws either in principle or in detail, since the Model is likely to be used as a 'first draft' for the proposed regulations.

Loan of RIBA Drawings for Exhibition in the USA. The Library was asked by Minneapolis Institute of Fine Art to provide an exhibition of drawings for the Convention of the Society of Architectural Historians (USA) being held at Minneapolis in January 1961. Inquiries suggest that up to a dozen institutions in the east, mid-west and west coast areas of the US and Canada would also welcome such an exhibition.

The Library have accordingly made a selection of 54 drawings, which they have had mounted, framed and sealed into their frames. They propose to use this selection as their standard exhibition, both for this projected tour and for any future exhibitors who ask for a representative selection of our drawings. Specially designed slotted boxes have been made, so that packing and transport will be simple.

The cost will be confined to mounting, framing, the provision of the special cases, and transport and insurance to and from the port of arrival and departure in the US. This will be borne out of Library funds.

The Library Committee asked for the Council's authority to lend the drawings for this proposed overseas tour, for the necessary 12 to 18 months. The Finance and House Committee having considered this proposal, the Council gave its approval.

Bound Half-Volumes of the RIBA Journal

As members already know, the JOURNAL Sub-Committee made the change over to A4 size halfway through volume 67, considering that the arguments in favour of changes at that time outweighed the inconvenience of two half-volumes. Orders can now be taken for the bound half-volume November 1959 – April 1960. There is no need for members to send in their own copies unless they wish as they can be ordered bound complete (omitting advertisement pages) at 5*s.* 6*d.* paper-bound or 8*s.* buckram, postage 2*s.* extra each volume. For those who wish to make their own arrangements for binding, cases only may be ordered at 4*s.* each, postage 1*s.* 1*d.* extra. Corresponding prices for the half-year May – November 1960 will be given later.

The Age of Charles II

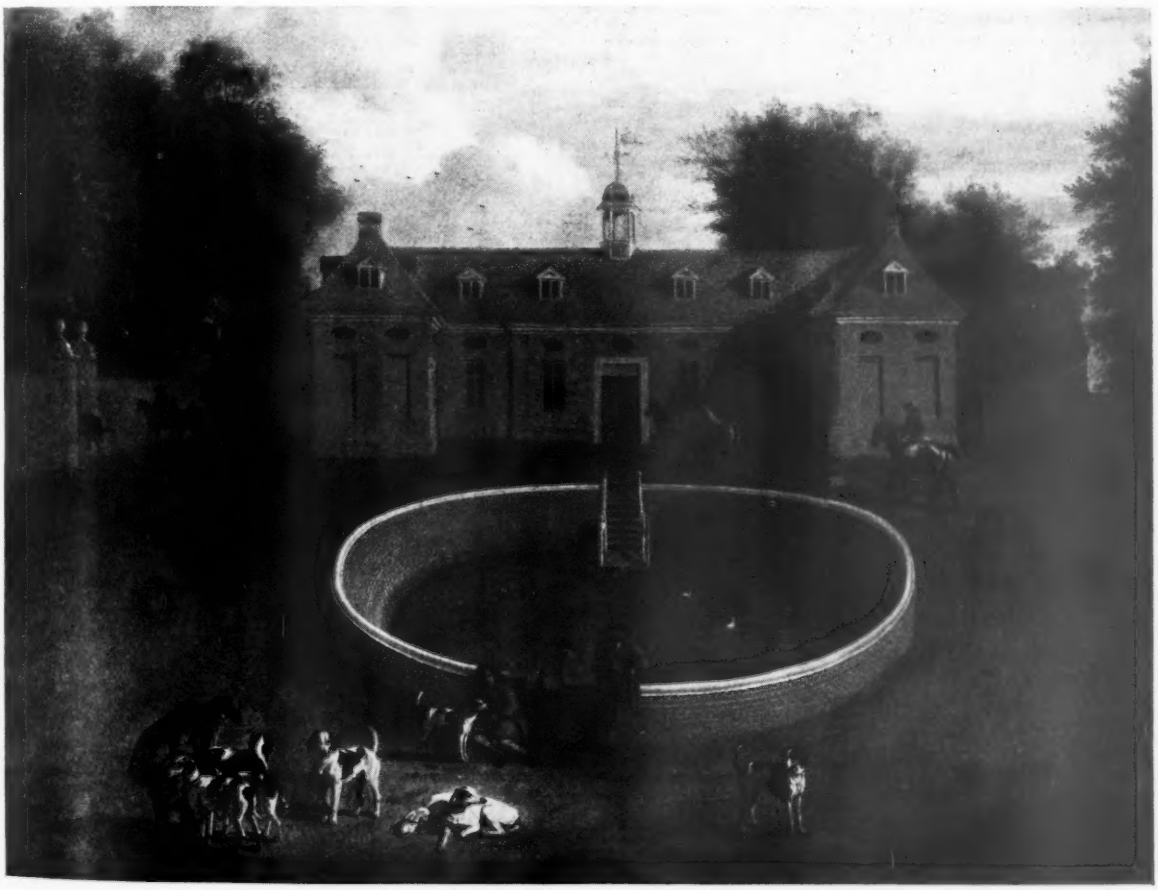
The Winter Exhibition which opened at the Royal Academy on 9 December has been selected from works executed in England between 1660 and 1688.

The age of the 'amiable and unprincipled' Charles II was of course also the age of Baroque and Rationalism (The Royal Society founded 1662; Habeas Corpus Act 1679). Inigo Jones had died in 1652 but he bequeathed to the Restoration successors of the calibre of Webb, Wren, Hugh May and Roger (Coleshill) Pratt. Portraits of the last three hang in the exhibition.

Many of the paintings are as familiar as quotations from Shakespeare – a stately sequence of canvasses whose sitters, mostly standers actually, have facial expressions considered appropriate with which to regard such persons as Lely, Kneller, Van Dyck, and the lesser fry. Those lower down the social scale like Pepys, Evelyn, Halley, Tompion of clock fame etc. are grave but less haughty. It is a magnificent collection.

The topographical paintings are minor works but the Horseguards Parade in 1685 is a pleasant record of *rus in urbe cum* red-coats, and a view of the Thames with Whitehall Palace in the distance [224] is worth study in the light of what has happened since. Why don't Londoners care more about their river? There is a specimen or two to show what Grinling Gibbons and his followers could do, but a quite splendid collection of furniture. These Carolean artist-craftsmen had a mastery of style which also embraced comfort. They were not to blame for what has happened since in the furniture trade and the antique business. Among the many splendid objects there are a number which make the kind of trophy awarded today for prowess in sport or films look nonsense; for example, the Picasso-esque Wrotham jug lent by the Victoria and Albert Museum and the near-by glass goblet [313]. The quality of craftmanship even of scientific instruments is a delight. Among these last is an adding machine, described at the time 'as a new and most useful instrument for addition and subtraction of pounds, shillings, pence and farthings; without charging the memory, disturbing the mind or exposing the operator to any uncertainty . . .'. That seems the right note to end on 300 years later.

From 'The Age of Charles II': A Scene at Cheveley Park, by Jan Siberechts (1627–1700)



New work for private offices in the third quarter of 1960

The value of new work commissioned of private architects in the third quarter of 1960 was about the same as in the previous quarter, and nearly one quarter above the level of a year earlier. Offices in London and Middlesex, the Midlands and the North Western regions showed a decrease in new work compared with both the second quarter of 1960 and the third quarter of 1959.

Parallel with this, new commissions for the larger firms employing ten or more architectural staff fell by one third compared with the second quarter. The small firms (those employing between one and five architectural staff) did rather better, however, benefiting from an increase in new commissions for private housing.

New commissions for private owners and developers in the third quarter of 1960 were at about the same level as in the previous quarter, but were still about 20 per cent greater than in the corresponding quarter of the previous year. Commissions for both industrial buildings and offices and banks showed a fall compared with the second quarter, but this was balanced by an increase in private housing and other commercial and miscellaneous building.

New commissions for public authorities in the third quarter of 1960 were substantially higher than a year earlier, due mainly to an increase in housing. It should be noted, however, that increases in particular building types for public authorities may reflect only the general pressure of work on local authority architects' departments which has led them to put out an increased volume of work to private architects.

Taking the work of all firms in the sample, the ratio of projects cancelled or postponed to new commissions received in the third quarter, in value terms, was 1 : 14, as against 1 : 10 in the previous quarter. There were about equal numbers of cancellations and postponements. Financial reasons accounted for one seventh of the value of projects abandoned or postponed, less than in the second quarter; difficulties over the site and in obtaining planning permission were responsible for about two fifths. Other reasons given varied from the death of the client to the projects being placed elsewhere for an unspecified reason. The smaller firms suffered relatively more from postponements or cancellations than did the large firms.

Table 1 Estimated value of new work for which private architects were appointed

Period	1959	Change over previous quarter	Change over same quarter of 1958	1960	Change over previous quarter	Change over same quarter of 1959
	£ million	%	%	£ million	%	%
First quarter	267	+41	−5	361	+34	+35
Second quarter	222	−17	−2	271	−25	+22
Third quarter	225	+1	+60	276	+2	+23
Fourth quarter	270	+20	+42			

Table 2 New commissions for private architects analysed by type of building

(£ million)

Type of building	1959				1960		
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
New housing							
For public authorities	17	28	13	13	18	17	33
For private owners and developers	77	57	68	74	108	54	67
	94	85	81	87	126	71	100
Other new buildings							
Private industrial building	46	32	30	55	54	54	36
Private offices and banks	21	14	15	31	20	37	24
Other commercial and miscellaneous buildings for private clients	63	37	41	38	54	46	57
Educational (public and private)	26	34	23	27	56	31	27
Other buildings for public authorities	17	20	35	32	51	32	32
Total, new commissions	267	222	225	270	361	271	276
For public authorities	53	65	61	61	110	72	80
For private owners and developers	214	157	164	209	251	199	196

Table 3 New commissions for private architects analysed by region, based on the location of the architect's office

(£ million)

Region	1959				1960		
	First quarter	Second quarter	Third quarter	Fourth quarter	First quarter	Second quarter	Third quarter
London and Middlesex	117	79	102	103	128	114	101
Home Counties	32	21	33	26	59	28	40
South Western	14	14	11	15	24	11	22
Midlands	27	27	22	31	39	41	27
North Eastern	24	27	22	30	38	22	35
North Western	23	25	23	33	42	19	19
Total, England	237	193	213	238	330	235	244
Scotland	25	23	7	26	22	28	27
Total, Great Britain	267	222	225	270	361	271	276

Regional analysis

Figure II and Table 3 show how new work commissioned of private architects was distributed according to the regional location of the architects' office.

In the third quarter the value of new commissions in the London and Middlesex region fell below the level in the previous quarter and were also lower than a year earlier, as were those for the North Western region. The rest of England showed an increase over the level in the second quarter, and over the third quarter of a year earlier. The South Western and North Western regions both did particularly well.

The value of new work in Scotland was maintained at about the same level as in the second quarter, and was above that of a year earlier.

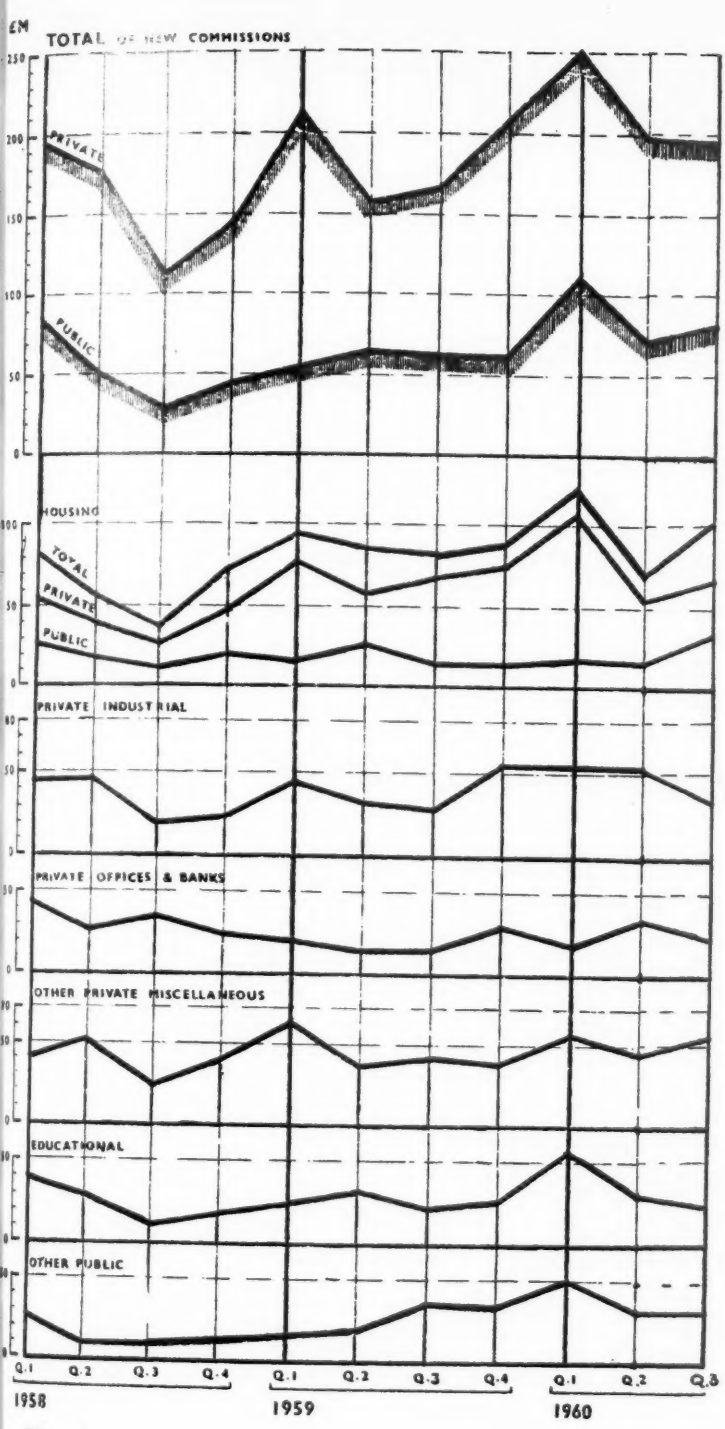


Fig. I

New commissions for private architects analysed by type of building.

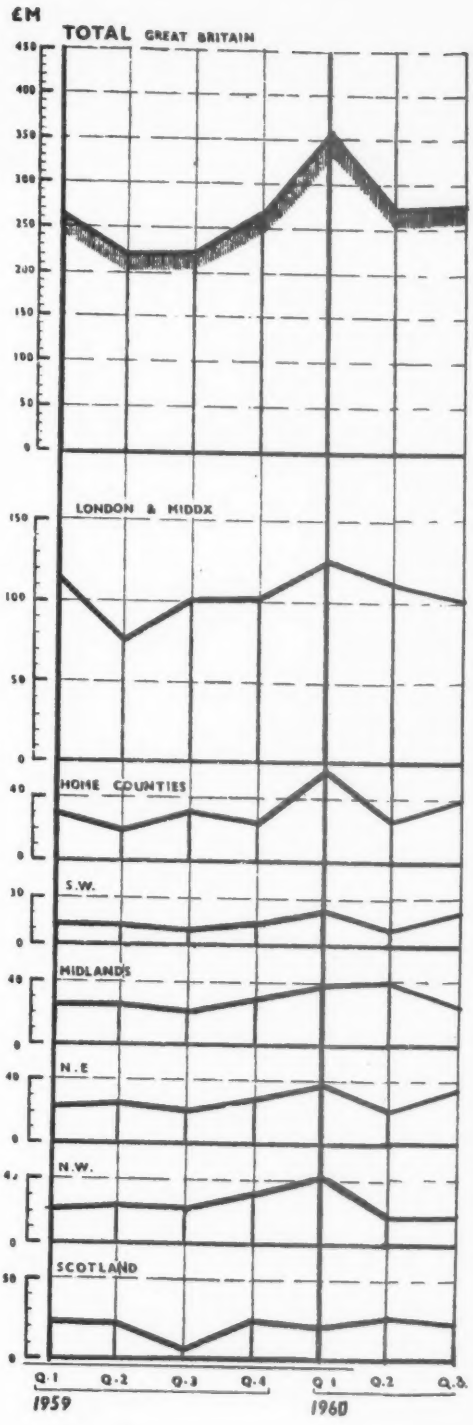


Fig. II

Regional analysis of new commissions based on location of architects' offices.

Staff changes in City and Borough Architects' Departments 1959-60

The Pilkington report on Doctors' and Dentists' remuneration showed that of all the professions surveyed in 1955–56, architects had the lowest incomes, and that architects employed by local authorities as a group came at the bottom of the scale along with assistants in private practice.

A study of the returns of staffing and establishment of a number of City and Borough Architects' Departments, shows that there has been an absolute improvement in the position of architects since that date; not only in the salaries paid to each grade of staff (see Table 2), but also through the upgrading of posts.

Table 1 summarises the staff changes that have taken place between 1959 and 1960. There was an increase, in the departments covered, of about 8 per cent in the number of posts for qualified architects; but the proportion of posts filled declined from 91 per cent in 1959 to 88 per cent in 1960. The number of posts at the higher levels were increased substantially, by 60 per cent in the 'lettered' grades for senior staff (with salaries of £1,565 upwards), and these posts were virtually all filled. There was a similar increase in the number of posts at APT grade V (present salary scale £1,310 to £1,480), but of these 6 per cent remained unfilled; while for APT grade IV (salary scale £1,140 to £1,310), 12 per cent of the posts remained vacant. Looking at grade III or special grade (a grade intended for architects who have passed the RIBA Final examination, with a current salary scale of £840 to £1,145), there was a drop of 20 per cent in the number of posts, but the proportion filled fell even more, from 88 per cent in 1959 to 84 per cent in 1960. Thus clearly an up grading of posts has taken place in a number of departments in an effort to overcome the present staff shortages. This has resulted in only a modest increase of 4 per cent in the total number of qualified staff employed by these departments, the increase being concentrated in the upper levels of staff.

For the grades appropriate to assistants prior to qualification, there was a drop both in the number of probationers and trainees and in the number of assistants at intermediate level (APT grades I and II). At both these levels one post in five remained vacant.

This information was obtained from the annual returns submitted to the City and Borough Architects' Society by their members. The returns analysed relate to 39 city and borough architects' departments, who made returns in both 1959 and 1960. There are 63 cities and boroughs who have architects' departments.

Table 1 Staff changes in city and borough architects' department between 1959 and 1960

Architectural Grades	Staff establishment at 1 January			Staff in post at 1 January			Staff in post as a proportion of establishment	
	1959	1960	% change 1960 on 1959	1959	1960	% change 1960 on 1959	1959	1960
			%			%	%	%
Grade E and above	7	10	+43	7	10	+43		
Grade D	7	5	−29	7	5	−29		
Grade C	3	4	+33	3	4	+33		
Grade B	12	25	+108	12	25	+108		
Grade A	24	41	+71	24	40	+67		
Total, lettered Grades	53	85	+60	53	84	+59	100	99
APT V	79	130	+65	78	122	+56	99	94
APT IV	150	206	+37	141	182	+29	94	88
APT III and Special Grade	419	336	−20	369	281	−24	88	84
APT I and II	287	247	−14	245	198	−19	85	80
Total, APT I–V	935	919	−2	833	783	−6	89	85
General Division (Probationers and trainees)	142	144	+1	134	117	−13	94	81
Miscellaneous	40	41	+3	35	32	−9	88	78
Total architectural staff	1,170	1,189	+2	1,055	1,016	−4	90	85
Approximate No. of qualified architects (Grade III/Special Grade and above)	701	757	+8	641	669	+4	91	88

Compiled from the returns of 39 local authorities made up of 23 County Boroughs, 7 Municipal Boroughs and 3 Metropolitan Boroughs, who replied in both years 1959 and 1960.

Table 2 Salaries of architects employed by local authorities, 1956 and 1960

Architectural Grades	1 April 1956	1 September 1960
	£	£
Lettered Grades		
Grade E and above	1,515–	1,860–
Grade D	1,405–1,625	1,710–1,975
Grade C	1,295–1,595	1,560–1,825
Grade B	1,440	1,670
Grade A	1,380	1,565
Administrative, Professional and Technical Grades		
V	795–970	1,310–1,480
IV	710–885	1,140–1,310
Special grade*	690–815	840–1,145
I and II	530–675	645–815

* A slightly wider scale than grade III, special to architects who have passed parts I and II of the RIBA Final or Special Final examinations and who have had at least five years experience – (including the period spent on the theoretical training).

The Allied Societies' Liaison with the RIBA

The following statement has been approved by the Presidents of the Allied Societies and by the Allied Societies' Conference. On page 124 there is an account of an informal meeting between members of an Allied Society and the President and Secretary RIBA which illustrates some of the points made in this paper.

The Allied Societies' Conference on 3 November 1959 considered a paper which suggested that the Conference should meet annually, that there should be periodic meetings of the Honorary Secretaries of the Allied Societies at the RIBA, and that the Allied Societies should be sent policy and other matters to work upon on behalf of the RIBA. It was the view of the Conference that, pending the outcome of the review of the Constitution of the RIBA Council, the machinery for liaison was satisfactory, and that no useful purpose would be served by the changes proposed. It considered that the Conference should continue to meet three times a year, and saw no case for meetings of the Hon. Secretaries. It did recommend to the RIBA Council, however, that a standing committee of the Presidents of the Allied Societies should be formed, and it concurred in the suggestion that policy and other matters be referred to the Allied Societies to work on.

The Council on 8 December 1959 referred the matter back to the Allied Societies' Conference for discussion with the new officer who was then about to be appointed with responsibility, *inter alia*, for liaison with the Allied Societies. The officer, Mr Malcolm MacEwen, took over his duties in April, and the Allied Societies' Conference agreed on 2 May 1960 to defer consideration of this matter until its next meeting (1 November) in order to allow Mr MacEwen time to consider the present organisation. At the same meeting the Conference also discussed the machinery for liaison in relation to matters under review by the RIBA Council. The Conference resolved that, pending any reorganisation of the machinery for liaison, the respective Societies should authorise their Presidents or Chairmen, if necessary, in conjunction with the Presidents or Chairmen of other Allied Societies, to consider and comment on matters of urgency.

The Constitutional Committee's work is now completed, and it may be assumed that its recommendations will in due course be incorporated in the bye-laws. The representatives of the provincial members (who will also be members of their respective Allied Society Councils) will in future serve for three or six years on the RIBA Council. This should considerably strengthen their effectiveness on the Council, and ensure that the Council is closely in touch with the provincial members and the Allied Societies.

It is clear from the proceedings of the Allied Societies' Conference, referred to in paragraph 2, that a regular meeting of Allied Societies' Presidents would command the support of the Conference. Such meetings have the advantage that they are much smaller (a maximum of 30) than the unwieldy Allied Societies' Conference, and could be extremely useful as a means of consulting the Allied Societies, of keeping the Presidents, (and through them the Societies) much more fully informed about the work of the Institute, its committees and officers, and as a forum for the exchange of information and ideas about the work of the Allied Societies themselves. Such meetings could, for example, discuss urgent and important questions of special interest to provincial members (such issues as the scale of fees, the package deal, and competition by tender spring to mind) on the basis of carefully prepared documents or statements. They could hear reports from committee chairmen and the officers, who could take the Presidents into their confidence in reporting on their present and their future work, and this in turn would provide excellent opportunities for the Presidents (also on the basis of careful preparation) to contribute the experience or ideas emanating from their members. At a meeting held on 3 October 1960 the Allied Societies' Presidents expressed the view that they should continue to meet periodically at the discretion of the chairman of the Allied Societies' Conference, and that in the first instance they should meet once a quarter.

The Allied Societies' Conference suffers from many serious defects: the lack of continuity in its membership, its unwieldy size, and its lack of responsibility or executive power. It is proposed to amend the relevant bye-law, in the course of the current constitutional changes, to omit the nomination of deputies. This provision, which is of recent origin and was intended only to permit a representative of an Allied Society to send a deputy in the event of serious illness or other unavoidable cause, has been loosely interpreted. This has inflated the size of the Conference and disrupted continuity by enabling representatives to be replaced by deputies who have no experience of earlier meetings. The Conference is by its nature only a consultative body and can only have useful debates if the items on its agenda are carefully prepared, for haphazard and spontaneous discussion of difficult questions rarely leads to anything but confusion and frustration. It is therefore suggested that in the ordinary way the principal items for the Conference agenda would first be discussed by the meeting of Allied Societies' Presidents, to ensure that only such questions as had been adequately prepared would come before the Conference, the members of which would also be forewarned to come to the Conference fully briefed with information from their own area on the subjects to be discussed. The Allied Societies' Presidents, at their meeting on 3 October, agreed that the Conference agendas should be prepared in this way. They also recommended that the joint meeting of the Allied Societies' Conference with the Council of the RIBA should be discontinued because it had served no useful purpose, and that the Allied Societies' Conference should be convened at least twice a year.

The President invited the Allied Societies' Presidents to an informal dinner at the RIBA on Monday 3 October. This, the Allied Societies' Presidents suggest, might become an annual event to enable the President, at the beginning of each session, to discuss informally with the Presidents of Allied Societies the major issues before the profession and the Institute.

The Constitutional Committee's recommendations included the proposals that General Meetings of the Institute might be held outside London. The Annual General Meeting of the RIBA is in no way representative of members outside the London metropolitan area, and some opportunities should be created to enable members outside London to meet the President, Hon. Secretary, Hon. Treasurer and some of the officers of the Institute, to hear at first hand about the work of the Council, its Committees and officers, and to voice their criticisms or suggestions. It is suggested, therefore, that once or twice a year regional meetings of RIBA members be convened at such places as Bristol, Leeds, Manchester, Newcastle upon Tyne, and Edinburgh. It might be found that such meetings would be more fruitful than the joint meeting of the Council and the Allied Societies' Conference.

Senior members of the RIBA staff should be invited from time to time to attend meetings of the Councils of Allied Societies when items concerning their department are the subject of discussion. This would greatly improve the two-way process of exchange of information and would foster mutual goodwill.

The President, in the course of his two years in office, normally attends the annual dinner of each of the Allied Societies. These visits are immensely appreciated, but it may be asked whether this is always the best way for the Allied Societies to entertain the President and to make use of his time. Many members of the RIBA and of Allied Societies do not wish to attend these functions (for financial or other reasons) and the audience necessarily includes many people (wives of members, and representatives of the building industry and their wives) who are not really interested in the major issues confronting the profession. Nor is a dinner the most suitable forum for a serious speech, or for any kind of discussion. An alternative course, which may commend itself to some societies, would be to invite the President to address a meeting of the society (which would be open to every member, and if thought desirable to non-members and to the press) on topical issues. Afterwards, there would be a dinner, formal or informal, or such other social event as a society wishes. One society has already suggested such an evening. An evening of this kind brings the ordinary member in closer touch with the President, and the opportunities for a frank exchange of views and ideas are better, and this is combined with an agreeable social function at which the society can entertain the President.

A Humanist Architecture for America and its Relation to the Traditional Architecture of Japan

By Minoru Yamasaki, B ARCH, HON. DR OF HUMANITIES, HON. DR ARCH

The Marley Lecture given at the RIBA on 15 November 1960 under the auspices of the Yerbury Foundation. Mr Owen Aisher in the Chair.

I am grateful for this opportunity to reassess my architectural thinking and further to explore an area in the study of contemporary architecture in which I am extremely interested. Frequent visits to the Orient and to Japan have helped to clarify my belief that the understanding of certain qualities in Japanese architecture will help architects to shape the kind of environment necessary to a better life. Being a Nisei probably makes me a logical candidate for this kind of discussion.

Though I jokingly protest that those who contend that my buildings have a distinctly Oriental flavour have seen my face or name before seeing my work, I am fully aware that my admiration of certain intrinsic qualities in Japanese architecture has had a positive effect on the underlying philosophy on which I try to base my designs.

In this talk I will try to outline an overall philosophy to which I believe contemporary architects must subscribe if they would participate in building the environment necessary to, and representative of man. I will also try to show you how an understanding of the traditional Japanese architecture can help architects in developing this philosophy.

The reason why I believe it is so important to clarify the objectives of this philosophy is because today in America and in the rest of the world there are a few very influential architects who sincerely believe that all buildings must be 'strong'. In explaining the word 'strong' in this context, the definition seems to connote 'powerful' – that each building should be a monument to the virility of our society. These architects look with some derision upon attempts to build a friendly, more gentle kind of building. I have heard endless discussions on this point in architectural circles in America, Europe and Japan.

The basis for their belief is that our culture is derived primarily from Europe and most of the important traditional examples of European architecture are monumental ones. Western architectural education has been slanted heavily towards Europe in architectural history, almost completely ignoring the very important periods of architecture of other parts of the world, such as Saracenic, Japanese, Chinese or Indian. European historical architecture for the most part has been based on the quality of monumentality. The need of the state, church, or the feudal families, the primary patrons of these buildings, to awe and impress the masses of people is clearly reflected in most of the important historical examples of architecture in Europe.

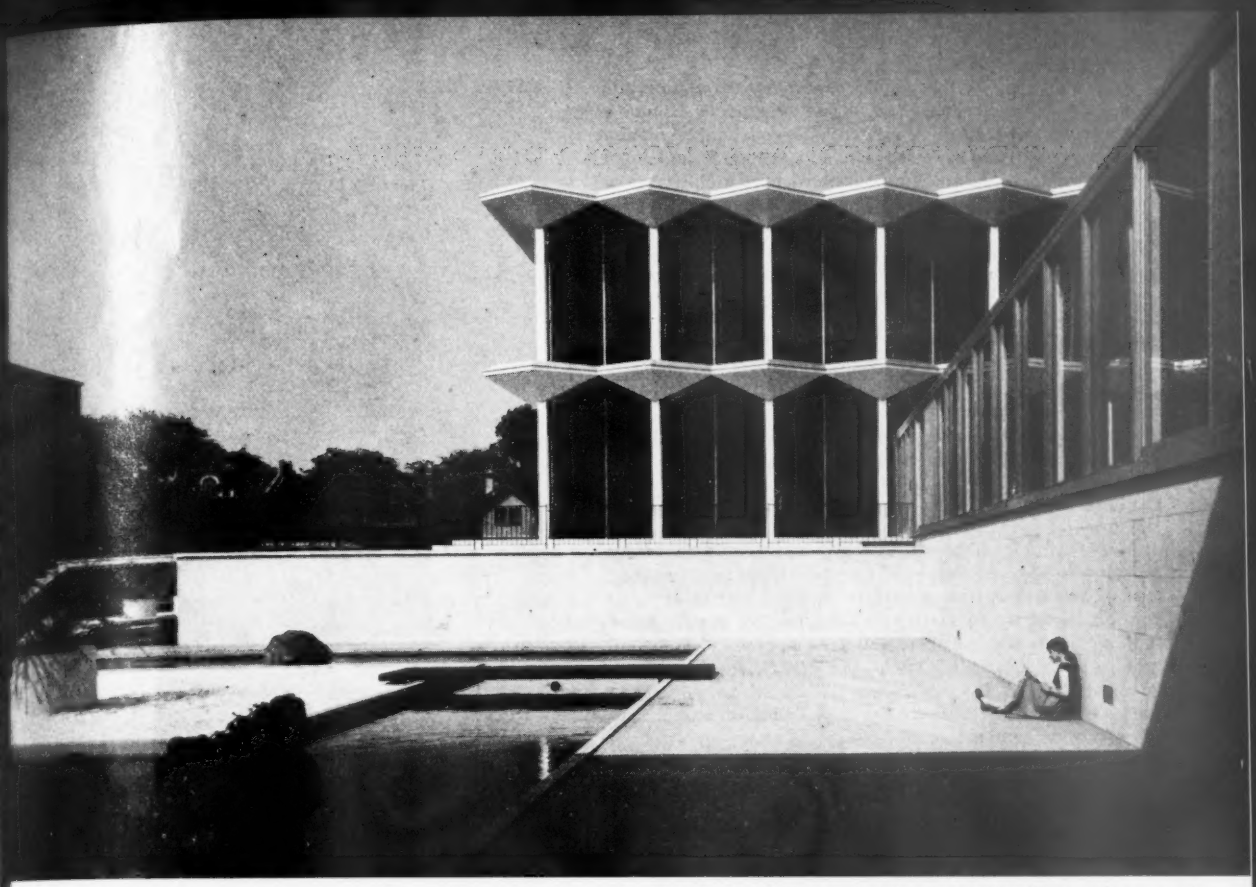
It is inevitable for architects who admire these great monumental buildings of Europe to strive for the quality most evident in them – that of grandeur. Deep in the heart of every architect, and I am no exception, is the ambition to erect a Chartres, a San Pietro for his own time.

The overwhelming uplift and excitement experienced in seeing buildings such as these cannot help but influence our thoughts and our work. Yet we must realise that the buildings we build for our times are for a totally different purpose. The buildings necessary for our society should not be objects to awe and impress us, but should be part of an environment to enhance our way of life and to serve as a thoughtful background for the activities of contemporary man. Attempts to turn commercial buildings, schools or residences into cathedrals or palaces can only result in buildings completely incongruous to our way of life. The element of mysticism and power basic to this kind of building have little place in the world of free man.

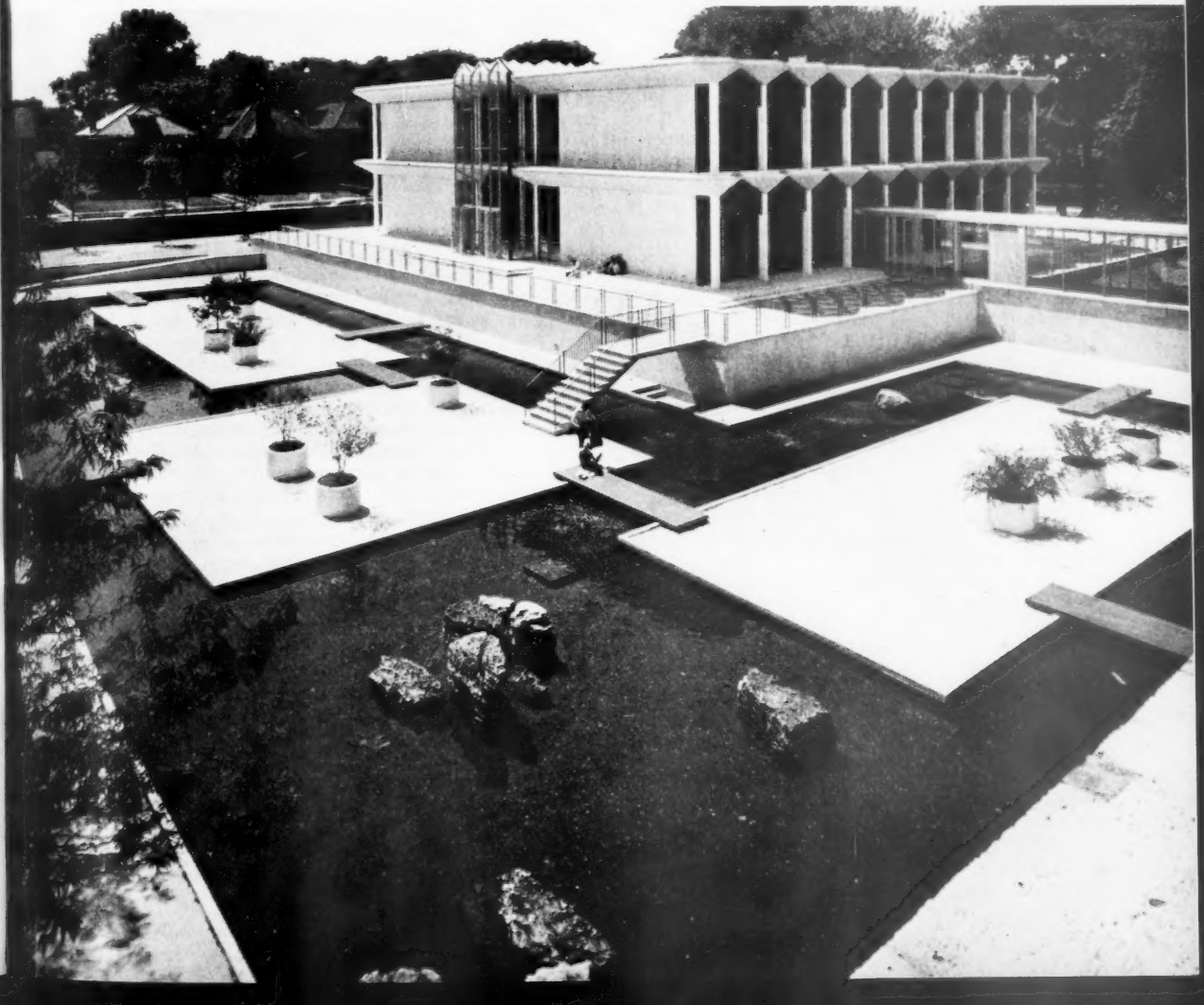
There is another, much less desirable, aspect of this effort toward monumentality. There are examples of architectural 'muscle-flexing', evidencing a desire to be stronger, more powerful, more exciting than the buildings of competitors. The result of this thinking inevitably ends in crudity, almost to the point of brutality. There are many results of this kind of thought built, and being built, in the Americas, in Europe, and in Asia. Shockingly, in Japan, with its background of sensitive, intimate architecture, there are too many new buildings based on these characteristics.

Such buildings can never be part of an appropriate environment for a democratic society. They are much more appropriate as an image for the totalitarian principles which we abhor. The dogmas of totalitarianism demand buildings powerful, brutal, to impress the masses with the absolute power of state. We can find evidence of this in our time in the buildings of Mussolini, Hitler and the Soviet Union.

In the democratic world I question even as great an artistic example as Le Corbusier's High Court at Chandigarh. Though I truly admired its tremendous visual impact, I



McGregor Memorial Community Conference Centre, Wayne State University, Detroit. Architect: Minoru Yamasaki. (Also illustrated on cover.)



question whether its power and crudeness are appropriate to the Indian people struggling against tremendous economic obstacles for freedom and for dignity. Though monumentality is without question an important and necessary ingredient for this building, this quality should be defined architecturally so that man may enter such a building with pride and his head high. Instead, I had the feeling of a great pagan temple where man must enter on his knees. Buildings elsewhere of this category, designed by lesser men and of less artistic merit, are infinitely worse. This kind of egocentric reasoning is one of the major causes of the confusion in architectural thinking in America – perhaps in the rest of the world also.

There is no question about the existence of such confusion. Its evidence is in the explosion of architectural ideas which indiscriminately gush forth to fill the streets of our cities. This flood of experiments in architectural design is producing almost every conceivable shape and form, and for the most part without reason. All these shapes, each trying to outdo the other, when placed together – as at Miami Beach or the Brussels Expo – can only result in complete chaos.

In the centres of most American cities it is the older buildings which usually hold our city landscape together. Our newer commercial streets, with their inevitable competition of signs and shapes of buildings, are hardly better than a Miami Beach. Experimentation is vital and necessary to all our fields of endeavour, but experimentation which is not controlled by the cohesive force of an underlying philosophy can only produce anarchy. Today we have a kind of anarchy in architecture.

The only way to eliminate this anarchy is to examine the essential reasons for the kind of architecture we must have, beyond basic characteristics of structural stability, utility and compatibility to the economic framework of society. Without the discipline and the inspiration which can be provided by a clear understanding of purpose, we will not be able to accomplish the gigantic job of framing modern man in his proper environment. That such a philosophy must exist today is obvious when we look in retrospect at past ages of architecture.

Throughout history the architecture of a particular society has reflected the beliefs and life of that society. The Greek architecture which we so admire was the product of the democratic beliefs of Greek civilisation. Egyptian architecture reflected the absolute power of the Pharaohs and the enslavement of the people. The pompous, superficial life of the French Renaissance monarchs can be well seen in their palaces. Yet in England the Renaissance expressed the beginnings of the dignity, the pride and the humanity that is the great heritage of the English speaking peoples today.

The architecture of our society must be totally consistent with our way of life and ideals. Though its obvious purpose is to house the complex activities of man, its more positive attribute is to elevate the spirit of humanity and be sympathetic and integrated with its ideals. We are both proud and thankful for our way of life. We rejoice in the great ideas of freedom for the individual and the dignity of man. The qualities of humanity we most cherish to implement these profound beliefs are those such as love, gentleness, joy, serenity, beauty and hope. An architecture which is representative of, and needed to implement our way of life must recognise these human characteristics which are fundamental to it.

This idea in its essence, I believe, is the philosophy of humanism in architecture – a philosophy dedicated to and consistent with the highest ideals of democracy. Humanism in architecture is a relatively new idea historically, and those of us practising at this critical time should rejoice in the opportunity and be thrilled with the challenge it offers.

In the concept of democracy man is the centrality – his dignity and individuality the core of the idea. So, too, in a humanist architecture the dignity and individuality of man must be the primary objective. If a building is too strong or brutal, it tends to overpower man. In it he feels insecure and

[*Photos: Baltazor Korab*

McGregor Memorial Community Conference Centre, interior

uncomfortable. A monument to the ego of a particular owner or architect is contradictory to the principle that each man who uses the building should be able, through his environment, to have the sense of dignity and individual strength to carry on his hopes and aspirations. The only strength we do need is the strength of our inner convictions in our purpose and our belief.

The variety and the individual ideas which are so important to our environment, to avoid the monotony which we see in our modern cities, are possible and desirable within a philosophy such as this. Individuality of man means individual ideas which work together to bring to flower the rich and wonderful environment for which we work. We know today only too well that the dogma of a particular architectural style, however great its master, can only bring deadly monotony to our cities. However, the freedom which is available under a humanist philosophy of architecture entails tremendous responsibility, just as we know that freedom to democracy does not imply that any individual can do anything that he wishes. A building must have full respect for the environment in which it is placed, as an individual must have respect for the community in which he lives.

Humanism in architecture, though begun in England and carried over into our colonial days, had difficulty in development because of the immaturity of democracy itself, and because architecture was inhibited by the use of traditional elements from the past. Today, with the maturity of our democracy and the full palette of techniques available to architecture, we are able to meet the challenge of an architecture for all the people.

The conception of an architecture for all the people instead of a select few is only possible through adherence to a

humanist philosophy – one which is consistent with the nobler ideas which we seek. To achieve this high purpose in architecture the goals to realise are:

1. To enhance the enjoyment of life through beauty and delight.
2. To be uplifting, so that we can reflect the nobility to which man aspires.
3. To give order, and through order, a background of serenity for the complex activity of modern life.
4. To be truthful. It must have an intrinsic clarity of structure which is natural and inevitable for the purpose it fulfils.
5. To have full understanding of, and fidelity to our technological processes, so that we may conserve our effort in the task of rebuilding our environment, and so that our architecture will be based on and thus be symbolic of the great advances in society made possible through industrialisation.
6 – perhaps most important of all – To be in scale with man so that he is at all times secure and happy in his environment and intimately related to it.

Most of these qualities are basic to the older architectures. Proportion, elegance of detail, nobility exist in the wonderful European buildings of the past. Though they must be translated in our own idioms, we can be much inspired by the expression of these qualities in great examples of architecture.

In two areas – the understanding of serenity and in the understanding of scale – we need further clarification from historical examples. It is here that I believe we can learn much from Japanese architecture. To explain my reasons for this, I would like to describe a visit which I recently made to a building in Tokyo. The building was a relatively new restaurant, designed by the architect, Horiguchi, who in Japan today is master of those who build within the Japanese tradition. I believe it is only in Japan that traditional architecture seems appropriate when built today, and then only in residences and in such restaurants or inns.

Facing the street, the exterior was simply a well-detailed wooden fence, the characteristic façade of most urban Japanese-style buildings. Once within the gate, however, it was apparent that this was a very special place. The combined feeling of peace and pleasure which I have found in the Katsura Palace, the Stone Garden, and in so many other examples of Japanese architecture seems to envelop us at once.

We walked down a corridor of garden lined with a variety of beautifully composed trees and shrubs, which ended with a delicate vertical bamboo fence. We made a planned turn to find an exquisite view; the most perfect arrangement of roof and building, walks and trees.

Each detail must have been extremely carefully conceived. Even the paving, with small stones set in cement, was irregularly interrupted by large pieces of rectangular stone to give substance, as rocks which rise from the surf give visual interest to an expanse of sea. The trees were particularly handsome specimens. Their overhanging and twisted branches were held up by wooden supports, so carefully shaped and sensitively placed that the total composition would have been incomplete without them. The walk passing through the garden floor of gravel was similar in texture. It was just different enough in colour to enhance the whole without becoming the too-strong stripe, so often true of our garden walks. The threshold to the building was a large, warm-hued stone, wetted to reveal its beautiful texture. It was just high enough to become a step to the raised platform of the floor.

We removed our shoes and quietly stepped on the matted floor of the low-ceilinged entrance hall. Turning again, we padded down a short section of semi-dark corridor to find ourselves in a breathtakingly lovely room. Everything about this room – the architecture, the furnishings, the view – was wonderful to me. In the corner, the windowed tokonoma gave opportunity to silhouette the exquisite flower arrangement and holder against the soft light of the rice-papered shoji. In the tokonoma was a narrow hanging, an essence of landscape, which seemed to balance the living landscape beyond the adjoining glass wall. The handsome low table before the tokonoma was the single piece of furniture in the room. The clutter which we suffer in America is apparent upon seeing such a room as this.

On another side of the room, ceiling-high glass sliding doors, with shoji stacked on one side, framed a deep garden view of sky, trees and stones in a gravel sea. On the adjoining wall were panels of shoji of two heights with impossibly thin muntins. I was curious that one of these sets of shoji looked as though they were in two parts – top and bottom. I asked, and my friend slowly raised the three lower panels to reveal a view of a shallow garden, lovely with slender green bamboo stalks and dark stones against a silvery weathered wooden fence. By allowing only the lower sash to open, the picture was controlled, to eliminate sky and bring out the beauty of ground and stones and moss and stems.

All these very special and beautiful elements were tied together with a skilful arrangement of posts and beams and straw coloured mats with strong black edges. The details were perfect – soft, lovely wood, quiet grain fitted with superb craftsmanship, grey-green plaster joined perfectly to wood providing deep contrast to luminous shoji.

I had been transported to fairyland, a delightful, peaceful dream, far away from the tumult of workaday Tokyo, Detroit or New York. I wanted to stay surrounded by this quiet beauty for ever. I believed then that within the quiet beauty of the Japanese environment I could be creative and live with the joy of lovely thoughts.

Then, waking up, I was again aware of the impracticality of trying to house 20th-century civilisation in the framework of traditional Japanese architecture. Scale, structure and materials are all inappropriate for the demands of our time. The discipline of total simplicity would be impossible for us. Yet the complete emotional satisfaction of each of many experiences I have enjoyed in Japanese architecture has developed a positive feeling in me that we of the 20th century can learn there.

The instilling of a significant degree of this quality of serenity is necessary to our future environment. The chaos caused by political turmoil, by traffic, by vast increases in population, and by the tremendous impact of the machine, demands that man must have a serene architectural background to retain his sanity. Interspersed with this serenity must be delight – the delight of interesting silhouettes, of waterplay, of variety in our indoor and outdoor spaces. But the unifying quality must be this serenity, physical representation of the belief of man that he can live in quiet dignity.

There are other qualities which we need, such as excitement; but excitement is fragmentary – the basic qualities of architecture must be more encompassing and enduring. We may be enthralled by the excitement of Broadway or Ginza at night, but we can hardly aspire to these as permanent diet.

The understanding of scale in our buildings which will enable man to live proudly and make him feel that he is in touch with his surroundings – a kind of over-all security – is much more difficult to pinpoint. Yet the experience of buildings such as those in Japan where this is true, should assure us that it is possible to translate this quality in our environment in our terms.

The challenge of our times philosophically, and politically, is tremendous; and the challenge of architecture is an integral part of the total challenge. Whether we, the architects of this time, are able to meet it remains to be seen.

Now I have some slides to show you of buildings that we have designed in recent years. The buildings are based on certain qualities for which we have been searching and we have been only partially successful in our attempt. I will point out to you where we went wrong. Taking a trip around the world I searched for the qualities that we might try to instill in our architecture on our terms, and the buildings I shall show you are poor attempts to reach out for the basic interest of shade and shadows and the ability to bring texture to

buildings. Again, there is the quality of surprise, which I found mostly in Asiatic buildings. This is a very important ingredient of finding an ability to cope with the modular industrialised architecture. I might describe this quality of surprise by telling you about the temple in Japan I visited, into which we had come from the chaos and turmoil of the streets – and I am sure that the Japanese cities are the worst in the world for turmoil.

You come to its quiet entrance, then you take off your shoes and go through a very dark temple, and in the distance there is a gleam of light. You walk towards the gleam of light and see the gravelled garden, with the red gravel beautifully raked, and you have an utter sense of peace. You stay there until you are somewhat settled and then you go out through the dark temple and find another court which is filled with trees. Here you see the pattern of a small maple leaf against the sky. You stay there for a while and then you find another court which is floored with water and irises and stones. All this is a completely delightful experience, and I believe we must think in terms of adding delight to our buildings, whether by this method or some other.

These are some of the things we have been searching for.

(A number of colour slides were then shown.)

QUESTIONS FROM THE PANEL

Mr Bryan Westwood [*F*] (Chairman of the Yerbury Foundation): Mr Yamasaki, I think in what you have said, you made clear your individual and human approach, your concern with the environment needed to lead a really good human existence. What worries me is that all the clamour in the building world in this country at the moment seems to be directed to the greater and greater use of prefabricated and standardised components – even standardised complete buildings. On the other hand, one feels that for any significant building one must take into account the individual features of a site and try to draw out of them a really significant structure. You have clearly managed to do that. How have you managed to come to terms with the mechanical age and design such beautiful individual buildings and yet reconcile them with the day to day problems of cost, of flexibility, and so on, which we are told is brought about by using a standardised system?

Mr Yamasaki: I feel that the human being is admitting defeat when he succumbs to standardised buildings. I believe that the vitality in our society can only be kept alive by producing the individual thinking which each of us can give to the world – not only architects, but everyone. I think it is a terrible thing to be forced by economics to have standardised buildings of any kind. Consequently I think it is up to us to break this. We have to show, by example or by argument, or by whatever method we can use, the importance of our physical environment and surroundings in our daily lives. Unless we do this we shall become robots.

Mr Peter Shepheard [*F*]: Do you think of yourself as a classicist? You have often been described as one. May I say in explanation of this question that 'classic' seems to me to be a bad word to use about architecture, because all good architecture – and for all I know all good literature too – is not either classic or its antithesis. Particularly I have found this true of Japanese buildings and gardens. There are many Japanese gardens, like the Shosoin and the Ryo-an-ji, which are very severe, yet all the time seem to have the attributes of what we would call the most romantic design. Do you think you are heading a classical revival or not?

Mr Yamasaki: Well, if I am, I did not know it! The reason why we have been doing symmetrical buildings – which is probably the basis for what is said – is that America will stand a symmetrical building once in a while, so we have schemes for symmetrical building periodically. However, I think that in most instances an asymmetrical building is much nicer. It depends on the problem and I have no leanings one way or the other as far as that is concerned.

If I may leave that question for a moment, I would like to take up another point. I think the problem of prefabrication, as such, has been that the metal industry has been controlling the ideas behind architecture. The problem there is that metal can only be extruded in large factories, and consequently manufacturing, in a sense, affects the design. I believe that unless architects take over society will be in trouble. This is evident on Park Avenue in New York, where the manufacturer has really taken over. The reason why I like precast concrete is because I think the architect takes charge again. So we have to strive for materials which will contribute aesthetically to the environment.

Mr Percy Johnson-Marshall [*A*]: I want to ask a question about the environmental problems because Detroit, and Mr Yamasaki's architecture there, poses a number of questions very sharply.

Not even Detroit's best friends would say that it is an urban masterpiece, and yet there is Yamasaki, creating the most extraordinarily beautiful monuments there. What does he feel to be the hierarchical quality which his buildings pose? For instance, the McGregor building is a real gem of the very highest level of the hierarchy of urban values. What does he think there ought to be running throughout the urban design scheme of a city like Detroit?

Mr Yamasaki: Perhaps I shall be running away from the question in saying that I think any individual should only do so much. I have not tried civic planning, as such, because I think that too many of us do too much. We spread ourselves too thin and then we get nowhere. There are many American architects who want to do whole cities. I think that is a terrible mistake, because the city becomes wonderful by the vitality of the ideas that come into being through the work of many people, and the imposition of a man or group on a complete environment is a kind of Fascism. So I beg the question.

Sir Hugh Casson [*F*]: I would like to say how much I enjoyed your talk, sir, and the modesty and sensitivity with which it was given. Unknown to you I visited your office once when you were away. What struck me as so extraordinary was that it was in a railway siding on the outskirts of Detroit, with box cars going past the window, and the whole place trembling. In fact, at one point I asked the secretary at what time we got to Grand Central.

In that extraordinary atmosphere, which one would think would be inimical, you produced these beautiful and serene buildings. You spoke most movingly about the serenity of the Japanese restaurant you visited and said you felt that in those surroundings you could create something splendid and thoughtful. Yet you managed to do that in these surroundings which would make some of us blanch.

Here I express my agreement with your views about Chandigarh and the Taj Mahal. If you go to see the Taj Mahal you want to stroke it and put your cheek against it. The sense of horror at Chandigarh was so strong that I actually panicked. I got prickles up the back of my neck and ran out of the building. The sense of willpower, or what I would call tyranny, was so powerful that I found it horrifying. Then, when I got out into the safety of the open air, I wondered whether a sense of horror is a necessity in certain masterpieces.

Another interesting point you brought out was that of virility – that there is a strong feeling now that everyone has to be virile. We see this sometimes in the United States, when two men meet and they punch each other almost into insensibility. Is this an essential part of the feeling that 'anything you can do, I can do better'? What is the psychological basis of this need for toughness and strength? Finally, what do you do with all the cars on your campus? Do you put them underground?

Mr Yamasaki: The cars on the campus are put on the surrounding areas; in other words, we have an expressway that borders the campus, and between that and the central block, which is the campus, there is a considerable area which will be built into multi-storey garages.

Serenity in that office did not exist, and so we had to run away from it. What really made us move was that I was talking to Florence Knoll, of Knoll Associates with whom we work a great deal, and a train went by, and she said, 'Where the hell are you? In a railroad station?' At that point we decided to move out.

Mr Shepheard: When I was in Philadelphia, Louis Kahn said to me that we English were always trying to plan our towns three-dimensionally. He said he thought this was an absolute waste of time, and that the only thing an architect could do was to take his own side and do the best he could.

Members of the panel of British architects who put questions to Mr Yamasaki after his lecture talking to Mrs Yamasaki. Left to right: Mr Peter Shepheard, Sir Hugh Casson, Mr Bryan Westwood (obscured) and Mr Percy Johnson-Marshall

This runs counter to the English and Spanish tradition. What do you think about that, Mr Yamasaki?

Mr Yamasaki: I tend to agree with Louis on this point because the plans we make for cities have necessarily to be completed fifty years later. For instance, in the University of Wayne State we did not try to shape the buildings, only to show the direction. Trying to shape the buildings is dangerous. Ideas change so greatly all the time that you suppress ideas if you have too rigid a framework in a particular plan.

On the other hand, the responsibility of the architect is very important because he cannot do just anything; he has to relate his work to the community around him. I think there should be a little give and take here. We must have a loose enough framework in which good ideas can come forth and work.

Mr Johnson-Marshall: I have been intrigued by the trend of this conversation, because I saw on the screen what looked remarkably like an excellent three-dimensional overall model of the university. I would say it is essential to have a guide to three-dimensional planning, allowing for flexibility. One of the things that makes Detroit almost impossible to live in is the complete lack of any visual integration. In going to Detroit I would have given a great deal to have had Yamasaki's model before I started. Unfortunately he was out when I arrived, so I had to invent my own Yamasaki in going round the buildings. When we got to the 20 ft. wall, my Yamasaki got into difficulties because he talked about motor-cars.

Reynold's Aluminium building is a real gem surrounded by an absolute tundra. There are acres of motor-cars until you come to the Northlands shopping area. Then there are more acres of motor-cars and then just a few telegraph poles. I was asking my Yamasaki this question, 'Did you put all that wonderful golden aluminium chain mail round that building so that the boys inside could not see all this stuff outside?' What does the real Yamasaki think?

Mr Yamasaki: Though the university looked like a complete plan, it was not. It was a directional plan. We tried to get four million square feet in this half mile by quarter mile super block. We talked that over with the administration and suggested that we got many architects to do this – Louis Kahn and Ed. Barnes had already started new buildings on the campus. We tried to get Eero Saarinen to do a building, but he was too busy.

What this means is that Kahn has a degree of flexibility as long as he stays within the general concept of the plan, but if he goes outside it, we shall be in trouble.

The answer to the question about the Reynold's mail has me licked. Unfortunately you can see through the screen because it is very thin and transparent and does not blot out the parking lots.

Question: Is Mr Yamasaki using any new roofing material?

Mr Yamasaki: On the first building we used plastic vinyl roofing. Since then we have done two other shell roof buildings with sprayed-on vinyl roofing. It has worked beautifully, so now we are doing the synagogue with it.

As we are talking about shell work, there is a form board and insulating process which is just beginning in America and which uses styro foam insulation board. We are pouring into this and it becomes a vapour barrier, and also we do not have to remove the forms. We use a form and plaster on the bottom of this and it takes care of all the problems.

Mr G. Goulden [*F*]: Has the translucent plastic used on the face of your buildings been satisfactory? Our experience in this country has been that it does not last well.

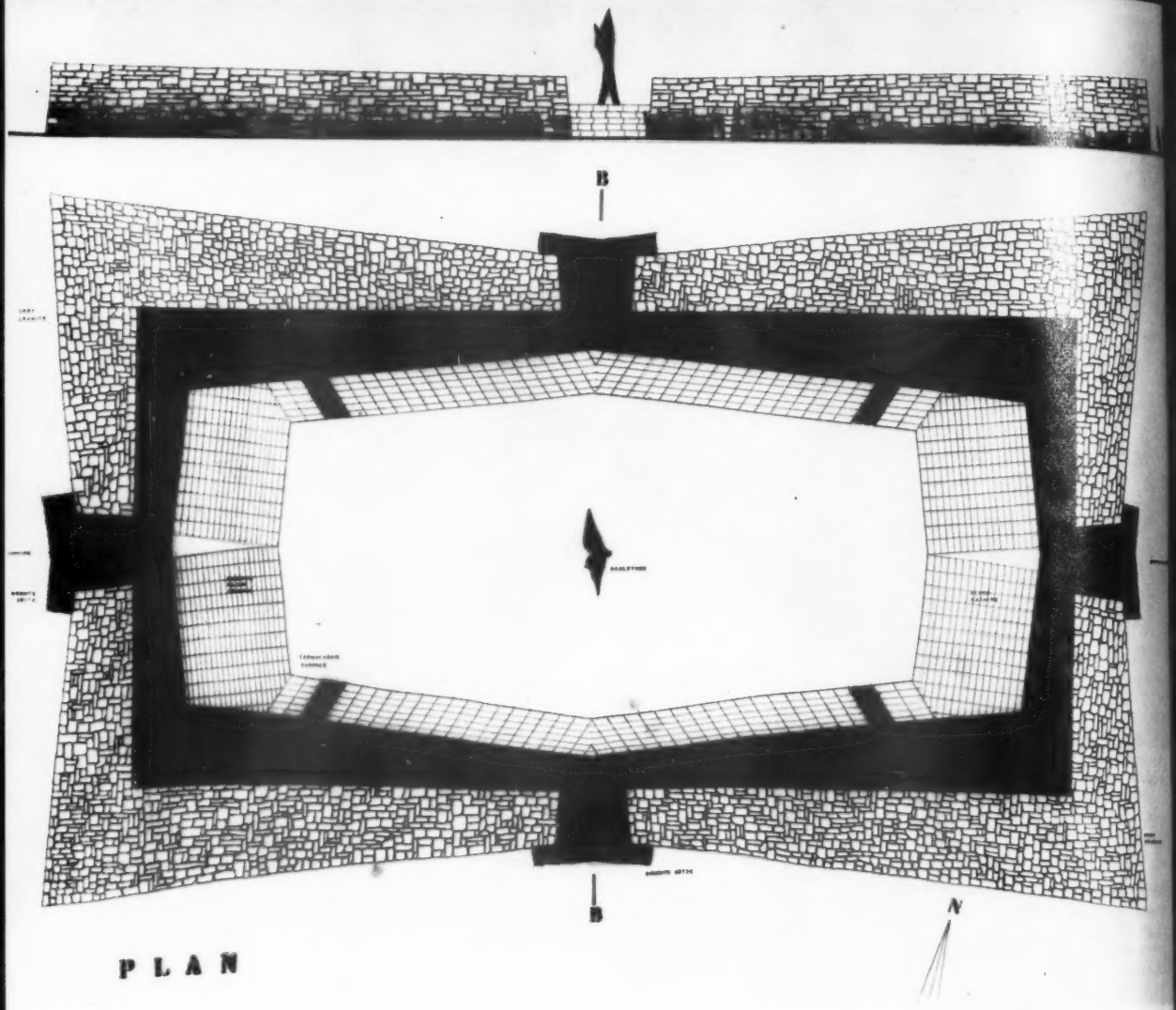
Mr Yamasaki: We have found that if we use polyester it changes colour and we are in trouble, so we are going to use acrylic, which is much more beautiful but cannot be used on the inside of a form.

Question: How do you get round the problem of an international style of architecture, and do you agree that the expression of your own buildings relies on an applied decoration?

Mr Yamasaki: I am not by any means trying to set an international style; I am only trying to solve our own problems. I am not quite sure that our buildings rely on exposed decoration. I know we have been accused of doing Venetian Gothic but, as I said in showing the slides, this was a jag we were on. We are serious about trying to get relations with the structural need of the building and establishing that in the way we think is most attractive.

(*A number of colour slides were then shown by Mr Percy Johnson-Marshall.*)

Mr Bryan Westwood: I am sure you would wish me to thank Mr Aisher not only for being Chairman, but for having the imagination to realise what we could do when we got busy on his idea of bringing people from abroad to give us some inspiration once a year.



PLAN

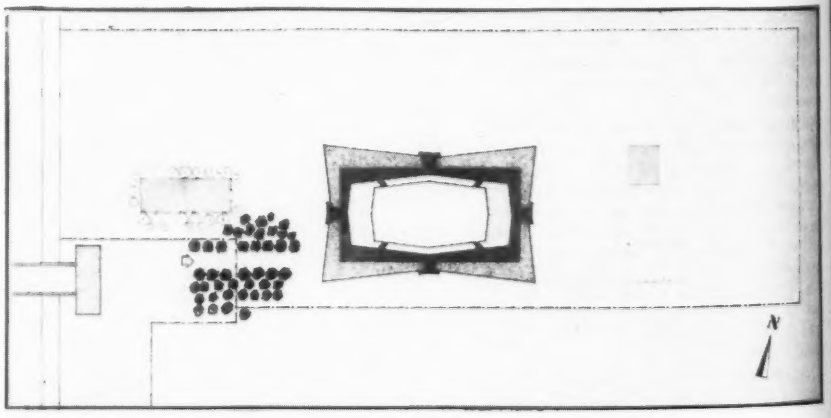
International Competition for the Memorial to Dachau Concentration Camp

The decision of the Jury to award prizes for the best six designs submitted in this competition was announced early in 1960, but no decision was made then as to which design would eventually be carried out. The only English entry (illustrated), by Miss Grizel Niven, sculptor, and Mr Paul Clinton, AA Dipl [A] gained one of the six awards. In the meantime, however, the Jury have recommended that the Comité International de Dachau, who organised the competition, should hold a second competition for the design of a piece of sculpture, though the setting for this sculpture has yet to be decided.

The Memorial consists of an open square surrounded by a double row of high granite walls on four sides. Between these two walls runs a narrow passage affording a complete break from the outside world and the interior space.

Entry is through the gaps in the walls, and once inside the walls the spectator is totally enclosed. The ground gradually rises to the centre on which is placed a bronze abstract reaching up towards the sky symbolising the Spirit of Man. This abstract is seen against a background of sky and grey walls and trees in the distance. At night time it is lit by a single searchlight placed underneath and shining vertically up into the sky.

The central area is smooth tarmac and the passages are paved with black granite setts.



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Diary of Events

TUESDAY 10 JANUARY, 6 p.m. General Meeting. Announcement of Award of Prizes and Studentships. *Modern Architecture and the Historian or the Return of Historicism*, by Professor Nikolaus Pevsner, CBE, PHD, MA, FSA [*Hon. A*].

THURSDAY 12 JANUARY, 7 p.m. Architects' Christian Union. Speaker: Rev. Prebendary Colin C. Kerr. Refreshments 6.30 p.m.

TUESDAY 24 JANUARY, 6 p.m. General Meeting. Address to Students and Presentation of Prizes and Medals 1960 by the President, Sir William Holford. Criticism by Mr Richard H. Sheppard, A A DIPL. [*F*], of work submitted for Prizes and Studentships.

TUESDAY 7 FEBRUARY, 6 p.m. General Meeting. *History of the Immediate Future*, by Dr Reyner Banham.

Notes and Notices

NOTICES

Third General Meeting, Tuesday 10 January 1961 at 6 p.m. The Third General Meeting of the Session 1960–61 will be held on Tuesday 10 January 1961 at 6 p.m. for the following purposes:

To read the Minutes of the Second General Meeting held on 13 December 1960; formally to admit new members attending for the first time since their election.

To read the Council's Deed of Award of Prizes and Studentships 1961.

Professor Nikolaus Pevsner, CBE, PH D, MA, FSA [*Hon. A*] to read a paper on 'Modern Architecture and the Historian or the Return of Historicism'.

(Light refreshments will be provided before the meeting.)

Fourth General Meeting, Tuesday 24 January 1961 at 6 p.m. The Fourth General Meeting of the Session 1960–61 will be held on Tuesday 24 January 1961 at 6 p.m. for the following purposes:

To read the Minutes of the Third General Meeting held on 10 January 1961.

The President, Sir William Holford, MA, PPTPI, FILA, to deliver an address to architectural students and present the medals and prizes 1961.

Mr Richard H. Sheppard, AA DIPL [*F*] to read a criticism of the designs and drawings submitted for the prizes and studentships 1961.

(Light refreshments will be provided before the meeting.)

Fifth General Meeting, Tuesday 7 February 1961 at 6 p.m. The Fifth General Meeting of the Session 1960–61 will be held on Tuesday 7 February 1961 at 6 p.m. for the following purposes:

To read the Minutes of the Fourth General Meeting held on 24 January 1961; formally to admit new members attending for the first time since their election.

Dr Reyner Banham to read a paper on 'History of the Immediate Future'.

(Light refreshments will be provided before the meeting.)

Session 1960–61. Minutes II. At the Second General Meeting of the Session, 1960–61, held on Tuesday 13 December 1960 at 6 p.m., Sir William Holford, MA, PPTPI, FILA, President, in the Chair.

The meeting was attended by about 130 members and guests.

The Minutes of the Inaugural General Meeting held on Tuesday 1 November 1960 having been published in the JOURNAL, were taken as read, confirmed and signed as correct.

The following members attending for the first time since their election were formally admitted by the President: *As Fellows:* R. A. Boxall, C. P. Dickinson, S. G. Lawrence, Andrew Renton, J. B. Wingate. *As Associates:* W. L. Bicknell, F. P. Black, E. K. Bolting, The Hon. Robert Bridges, J. E. Bull, D. S. Dredge, W. Q. Finch, F. D. Franks, Kenneth Gold, J. H. Goodband, G. M. L. Groves, Roman Halter, J. A. Hurrell, P. H. Jessamy, Gerald Levin, D. H. Richards, G. J. Wedderburn-Clarke.

Mr A. J. Harris, BSC(ENG.), MICE, MCONSE, having read a Paper on 'Architectural Misconceptions of Engineering', a discussion ensued and on the motion of Mr Anthony Pott [*A*], seconded by Professor A. W. Skempton, DSC, MICE, FGS, a vote of thanks was passed to Mr Harris by acclamation to which he briefly responded.

The proceedings closed at 7.35 p.m.

Cessation of Membership. Under the terms of Bye-law 21, the following have ceased to be members of the Royal Institute: *As Associates:* C. A. Bunn (Australia), W. J. T. Godwin (New Zealand), E. D. Johns (Australia), B. A. L. Rickard (Australia), M. K. Smith (New Zealand), F. G. D. Stone (Australia).

Annual Subscriptions and Contributions. Members' subscriptions and Students' contributions for 1960 became due on 1 January.

	£	s.	d.
Fellows	12	12	0
Associates	7	17	6
Licentiates	7	17	6
Students	2	2	0

For members resident in the trans-oceanic Dominions who are members of Allied Societies in those Dominions, and for members resident overseas in areas where no Allied Society is available, the amounts are as follows:

	£	s.	d.
Fellows	7	17	6
Associates	5	15	6
Licentiates	5	15	6

The Cheques Act 1957. The Cheques Act which came into operation on 17 October 1957 states that 'an unendorsed cheque which appears to have been paid by the banker on whom it is drawn is evidence of the receipt by the payee of the sum payable by the cheque'. The implication of this is that for payments made by cheque the issue of separate receipts is not necessary.

Members are therefore notified that in future receipts will not be sent for subscriptions paid by cheque, unless for any special reason a receipt is asked for.

As an additional precaution members sending cheques are advised to cross them 'A/C Payee only'.

The IUA Congress, 1961. The IUA Congress, 1961, the theme for which will be 'New Techniques and Materials – Their Impact on Architecture' will be held in London from 3–7 July 1961. This will take place of the British Architects' Conference.

The RIBA Appointments Department. **Special Note:** From 2 January 1961 until after the Congress of the International Union of Architects in July, the Department will be open *from Monday to Thursday only* of each week, as part of the Congress organisation is being undertaken by the Appointments Officer. Members and Students wishing to visit the Department are requested to telephone or write in advance for an appointment. If this is not practicable they should obtain from the Secretary an application form which when completed and returned to the Institute, will enable the Department to send the applicant particulars of vacancies suitable to their qualification and requirements, or to submit their names for vacant posts. Subject to the above limitations, the normal service of the Department will, of course, be maintained.

Members' Club Facilities. A Members' Luncheon Room is open on the sixth floor, run on a largely self-service basis. The price of luncheon for members and Students is 4*s.* and guests may be introduced. The luncheon service is available between 12 noon and 2 p.m. Luncheon vouchers issued through Luncheon Vouchers Limited will be accepted, as also will any vouchers issued privately by members in private practice to members or Students in their employment, if prior notice is given to the Catering Manager.

There is a Members' Club Room and Bar on the second floor. The room is open from 10 a.m. to 7 p.m.

Morning coffee can be served between 11 a.m. and 2.30 p.m., and afternoon tea between 3.30 p.m. and 7 p.m. The bar is open to members and Students from 12 noon to 2.30 p.m. and from 3.30 p.m. to 7 p.m. As an alternative to the luncheon room service, sandwiches may be obtained at the Members' Bar during the lunch hour.

The various facilities described are not available on Saturdays or Sundays.

Competitions

Note. An applicant for the conditions of a competition must state his registration number.

City of Lincoln: Civic Centre. The Lincoln City Council invite registered architects to submit designs in competition for a Civic Centre at Lincoln at a cost not exceeding £975,000 excluding clearance of site and all professional fees but inclusive of external works.

Assessors: Mr Geoffrey Jellicoe [*F*], Sir Leslie Martin [*F*] and Mr J. M. Richards [*A*].

Premiums: £4,000, £2,000, £1,000. The assessors reserve the right to combine the second and third premiums and to divide them into a larger number of prizes for designs of merit.

Last day for submitting designs: 7 July 1961.

Last day for questions: 31 January 1961.

Conditions may be obtained on application to the Town Clerk, Town Clerk's Office, Saltergate, Lincoln. Deposit £2 2*s*.

City of Westminster: New Housing Scheme. The City of Westminster invites architects to submit designs in competition for the layout of an area in Westminster of about twelve acres and for the design of flats and other buildings to be erected thereon.

Assessor: Mr Philip Powell, OBE [*F*].

Premiums: 1,500 guineas and a further sum of 1,500 guineas to the authors of not less than two or more than five of the designs placed next in order of merit.

Last day for submitting designs: 10 July 1961.

Last day for questions: 3 February 1961.

Conditions may be obtained on application to the Town Clerk, Westminster City Hall, Charing Cross Road, London, WC2. Deposit £3 3*s*. (payable by crossed cheque drawn in favour of 'The Westminster City Council').

New County Offices, Reading. The Royal County of Berkshire intend to promote an architectural competition for new County Offices on a site in Reading bounded by Abbot's Walk, Abbey Street and the Abbey ruins, at a cost not exceeding £700,000.

Assessor: Mr Frederick Gibberd, CBE, MTPI, FILA [*F*]. Particulars will be published shortly.

Royal Welsh National Eisteddfod, Maelor, 1961. Competitions Nos. 181, 182 and 183. All entrants must be Welsh or working or born in Wales. Full particulars were published in the JOURNAL for December, page 62.

Design of Wooden Office Furniture. Last day for submitting designs in the first stage: 28 February 1961. Last day for the second stage: 14 September 1961. Full particulars were published in the JOURNAL for October, page 463.

Harlow Development Corporation; Competition for Houses and Flats. Last day for submitting designs: 6 March 1961. Full particulars were published in the JOURNAL for July, page 334.

New County Offices at Newtown St Boswells. Last day for submitting designs: 31 March 1961. Full particulars were published in the JOURNAL for May, page 245.

Redevelopment of Piccadilly Circus. Last day for submitting designs: 16 January 1961. Full particulars were published in the JOURNAL for September, page 421.

COMPETITION RESULTS

Civic Centre, Neath

1. (£1,000) Mr Kenneth R. Hathaway [*A*].
2. (£500) Mr Barrie Dewhurst [*A*].
3. (£300) Mr Ceri Jones and Mr Roy Gammon [*A*].

Commended: Mr D. C. W. Vane [*A*] and Mr G. D. Baker [*A*]; Messrs Nicol and Nicol and Thomas [*A*]; Mr Harvey Freeman [*A*] and Mr Sam Bradley [*Student*]; Mr Alex Gordon [*A*] (Messrs T. Alwyn Lloyd and Gordon); Mr G. E. Grey [*A*] and Mr F. Hamer Crossley [*F*].

Council Offices, Dunbarton

Winner (£1,500): Mr J. Armstrong Lane [*A*], Mr Duncan S. Bremner [*A*] and Mr J. Alan Bristow [*A*].

Other Finalists (£400 each): Mr W. Norman Hunter [*A*]; Mr A. J. Deed [*A*]; Messrs Lancelot H. Ross and Lindsay [*A*]; Mr W. A. Clark [*A*] in association with Messrs Charles B. Pearson and Son [*F*]; Mr James H. Fisher [*A*].

Board of Architectural Education

RIBA Examination in Professional Practice and Practical Experience. The Examination in Professional Practice and Practical Experience was held in London and Edinburgh on 17 and 18 November 1960. Of the 149 candidates examined, 130 passed and 19 were relegated. The successful candidates are as follows:

Agabeg: G. R.
Allen: F. D.
Altmann: F. R.
Ashfold: B. A.
Barron: Thomas
Barton: A. J. E.
Bates: Donald
Beach: L. J.
Bell: J. R.
Blackwood: B. G. W.
Blades: B. F.
Bourne: K. B.
Bousell: R. E.
Boyd: W. B. P.
Brown: Geoffrey
Burn: J. U. B.
Burrows: T. N.
Buss: R. M.
Byrom: J. B.
Campbell: I. G.
Chan: A. Fai-Tong
Chandawarkar: Y. M.
Cherrill: J. O.
Collier: James
Cooper: Denis
Cowen: C. N.
Cowland: S. G.
Creedon: R. C.
Croft: H. K.
Crummett: P. A.
Czeremski: Antoni
Daniels: J. E. J.
Davies: D. T. I. G.
Davies: G. W. J.
Davies: T. A. R.
Davis: E. R.
Deeley: R. W.
Degler: Z. C.
Deighton: G. K.
Denning: N. E.
Deuchars: John
Dodds: A. J.
Donald: Kenneth
Donaldson: G. I.
Dryburgh: K. A.
Edmonds: N. A.
Ellis: G. W.
Farmery: I. H.
Fearnley: J. V.
Freeman: Miss G. M.
French: P. J.
Galberg: George
Gilmore: W. J.
Gray: P. D.
Griffith: Dennis
Grinyer: D. T.
Grubb: G. E.
Harding: C. M.
Harrison: Godfrey
Harvey: G. P.
Hawkins: G. J.
Heelis: Gordon
Herman: Abraham
Higgins: C. G.
Hill: D. S.
Honer: J. D.
Hunter: James
Isaac: A. R. G
Jack: M. D.
Jeavons: G. R.
Joel: S. V.
Jones: Gordon A.
Jones: Graham H.
Kinloch: I. W.
Knowles: W. C.
Lewis: G. L. R.
Lutomski: Miroslaw
McIlwaine: D. E.
March: R. J.
Marsh: M. J.
Max-Jarzabek: Jan
Mew: V. J.
Miller: R. A.
Millis: A. P.
Mortimer: K. C.
Murray: C. R.
Nesbitt: J. A.
Nicholas: L. A.
Nicholls: A. D.
O'Connor: Miss E. M.
Owen: Leslie
Palmer: P. J. J.
Parry: E. C.
Pooley: N. G.
Portbury: A. F.
Pradhan: A. V.
Preston: D. I.
Price: J. F.
Prosser: D. I.
Rawson: F. K.
Renhard: J. T.
Ridgett: J. W.
Robertson: F. W. B.
Routledge: J. H.
Rudowski: Leszek
Senkowsky: H. E.
Sexton: J. R.
Smith: Harold
Smith: John P.
Smith: Raymond C.
Smith: Ronald S.
Stovin-Bradford: F. R.
Stuckey: R. B.
Sutton: D. E.
Swaine: R. C.
Swanson: M. B.
Talbot: M. J.
Taylor: E. N.
Taylor: S. D.
Trajer: Janos
Walden: D. W. J.
Wallis: A. V.
Warner: Brian
Way: J. L.
Wenczek: E. B. O.
White: D. H.
Wild: L. A.
Wood: R. K.
Yeo: Miss A. Y. S.
Zehetmayr: Miss J. F.

Allied Societies

Changes of Officers and Addresses

Royal Australian Institute of Architects. New South Wales Chapter. President, A. H. A. Hanson [*A*]. *Queensland Chapter.* President, T. H. A. Cross, 166 Ann Street, Brisbane, Queensland, Australia. *South Australian Institute of Architects.* President, Gavin Walkley, MA, MLITT, BE, AMTPI [*F*]. *Tasmanian Chapter.* President, S. R. Lighton, 47 Sandy Bay Road, Hobart, Tasmania. *Western Australian Chapter.* President, M. H. Parry, DFC, AFC [*F*].

Essex, Cambridge and Hertfordshire Society of Architects: RIBA Architecture Bronze Medal. Nomination forms in respect of the above award for buildings erected and completed during the period 1 January 1958 to 31 December 1960 within the area of the Society are obtainable from the Hon. Secretary, Mr J. E. Hammond [*L*], Lloyds Bank Chambers, Main Road, Gidea Park, Romford, Essex. Nominations, which may be received from members of the Society or from architects outside the area of the Society who have carried out eligible buildings in the area, must be submitted not later than noon on 28 February 1961.

Certificates of Craftsmanship in Hertfordshire. Some eight years ago the Hertfordshire Chapter of the Essex, Cambridge and Hertfordshire Society initiated a scheme for making annual awards of certificates for work of outstanding craftsmanship in buildings erected in the county during the year.

Devon and Cornwall Society of Architects. Annual Banquet and Ball. Left to right: Mrs Crowther, Lady Holford, Sir William Holford, HRH Prince Chula, HRH Princess Chula, and Mr J. H. Crowther, President of the Society

Nominations are made by architects or builders and a small jury is appointed to inspect the work and make the awards. Although whole buildings are frequently nominated, it is comparatively rare to find a standard of workmanship in all visible trades high enough to justify a whole building award.

This years two awards were made, one for facing brickwork in a Friends Meeting House at Hitchin (Architect, Mr Paul V. Mauger [*F*]), erected by Samuel Foster Limited of Kempston, Beds, and one for marble and stone masonry in a convent chapel at Abbots Langley (Architects, Messrs David Stokes and Partners [*F*]), carried out by A. R. Brinsden Limited of St Albans, and David Whitehead and Sons Limited, sub-contractors.

The certificates were presented by Mr R. Owen Vine [*F*], Chairman of the Chapter, in the presence of the clients and architects concerned at an informal dinner held recently at Hatfield. Facsimiles were also given to the foremen and individual craftsmen who executed the work.

The jury making this year's awards comment somewhat ruefully on their small number and on the exigencies of a commercial age which tend to exclude opportunities for the exercise of superior skills. They wonder whether the apprentice trainee of today will ever know, let alone be capable of, the best work in his chosen trade.

Members of the Hertfordshire Chapter feel that this local activity is not only worthwhile for its own sake, but also because it helps to foster good relations with the building industry and the general public. They are glad to learn that their neighbours in Bucks have decided to initiate a similar scheme and they hope that the idea will spread.

Devon and Cornwall Society of Architects. Annual Banquet and Ball. The Society's annual banquet and ball was held on Friday 25 November 1960 at the Victoria Hotel, Newquay. The principal guests were the President, RIBA and Lady Holford; and HRH Major-General Prince Chula-Chakrabongse of Thailand, GCVO, and Knight of the most Noble Order of the House of Chakri, and HRH Princess Chula.

The toast of the RIBA was proposed by Prince Chula, and Sir William Holford responded. Other speakers included Mr J. H. Crowther [*F*] (President of the Society), Mr Geoffrey Wilson (MP for Truro), Lt.-Col. P. J. Barbary [*F*] (Chairman, Cornwall Branch of the Society), the Very Rev. H. M. Lloyd (Dean of Truro) and Mr Peter Cocks (Chairman of Newquay Urban Council).

Nottingham, Derby and Lincoln Society of Architects. Annual Dinner. The Society's annual dinner was held on Wednesday 9 November. Mr H. Jackson [*F*], Vice-President RIBA, replied to the toast of the RIBA and Allied Societies proposed by Mr B. L. Hallward, the Vice-Chancellor of Nottingham University. Other speakers were the Society's President Mr J. W. M. Dudding [*F*], and the President of the Nottinghamshire Law Society, Mr P. M. Robinson. Among the guests were the Lord Mayor of Nottingham, Councillor Roland Green, and the Sheriff, Alderman Cornelius Cameron.

North Staffordshire Architectural Association. Annual Dinner. The Association's annual dinner was held on Wednesday 26 October at the North Stafford Hotel, Stoke-on-Trent. Mr H. Jackson [*F*], Vice-President RIBA, replied to the toast of the RIBA proposed by Mr G. L. Greaves [*A*], President of the Association; and Mr E. Buxton, Chairman of the North Staffordshire branch of the Institute of Chartered Accountants replied to the toast of 'The Professions' proposed by Mr C. Green [*A*]. Mr R. J. Willis [*A*] a past president of the Association, proposed a toast to the guests to which Mr W. E. Welsby, Deputy Mayor of Newcastle, replied.

General Notes

ARCUK Maintenance Scholarships in Architecture. The Architects' Registration Council of the United Kingdom offer for award in June 1961, certain Maintenance Scholarships in Architecture. The Scholarships will be renewable from year to year until the student has finished his or her school training. They will be available for students of British nationality who could not otherwise afford such training to enable them to attend architectural schools approved by the Council. Students must, before submitting applications for ARCUK Maintenance Scholarships, ascertain from the local education authority for the district in which they reside, whether that authority has any form of financial assistance available in cases such as theirs. Applications will not be considered if no steps have been taken by students to secure such other assistance as may be available. The Scholarships will be available both for students who have already begun their training and for students wishing to begin their training. Scholarships will not be granted to students who will be less than 17 years of age on 1 October of the year in which the examination is taken.

Particulars and forms of application may be obtained from: The Secretary to the Board of Architectural Education, Architects' Registration Council of the United Kingdom, 68 Portland Place, London, W1.

Copies of previous years' examination papers may be obtained on payment of 6*d*.

The closing date for the receipt of applications, duly completed, is 31 *January* 1961.

Architects in Industry Group. The first informal meeting of the group was held at The Building Centre, London, on 17 November 1960.

The Committee meet regularly at the RIBA, but this was the first social gathering since the group was formed in 1959. Mr Stuart Bentley [*F*], Chairman of the group, said that it was the first of a planned series of meetings designed to disseminate highly specialised information in an informal manner, and to provide a platform for the exchange of ideas which it was hoped would help to knit the group more closely together. A number of similar evenings are planned for this year, and members have been asked to suggest subjects. Various working parties have been formed, and visits to industrial projects are being arranged. Application for membership should be made to Mr G. A. Gray, Hon. Membership Secretary, Architects in Industry Group, 37 Clifton Rise, Windsor, Berks. The annual subscription for membership is 21*s*. (overseas members, 10*s*. 6*d*.).

Society of Architectural Historians of Great Britain. The Annual Conference of the Society of Architectural Historians of Great Britain met in September at Oxford in the pleasant environment of the Queen's College. The Conference began on Friday 16th and ended on Sunday 18th, and during the weekend the Annual General Meeting and the Annual Dinner were held. The conference was well attended by over 60 members. Mr W. A. Pantin, of Oriel College, Oxford, delivered, with indomitable zest, a paper 'Domestic Architecture in Oxford'. Mr Cecil Stewart [*F*] lectured on 'The Dream and the Reality: some aspects

of Victorian provincial architecture' and Dr Derek Buttle [*A*] concluded the lecture programme with 'Athens comes to Oxford', an account of the Greek Revival work of James Wyatt in Oxford.

A pleasant morning was spent at Blenheim Palace and Mr David Green, the librarian at the palace conducted the party through the apartments and grounds.

At the Annual General Meeting the President, Professor R. A. Cordingley [*F*], announced that the Alice Davis Hitchcock, Medallion, presented annually, has been awarded to Sir John Summerson [*A*] for his book *Architecture in Britain, 1530–1830*.

At the conclusion of the conference Professor Cordingley completed his term of office and welcomed Mr John Gloag [*Hon. A*] to the Presidency.

Journal of the Town Planning Institute: competition for New Cover Design. The Town Planning Institute announces a competition for a new cover design for their Journal. The competition is not restricted to members of the Institute. The prizes will be as follows: first: 50 guineas; second: 25 guineas; third: 10 guineas.

The closing date for the submission of designs is 28 February and application for entry forms and conditions should be made without delay to the Secretary, The Town Planning Institute, 18 Ashley Place, London, SW1. The following have agreed to act as judges: Professor J. S. Allen, PPTPI [*F*], Mr W. Bor, AMTPI [*A*], Mr L. B. Keeble, FRICS, MTPI, and Mr W. L. Waide, AMTPI.

National Joint Council for the Building Industry. *Full-time pre-apprenticeship courses in building.* After considering those recommendations of the Carr and Crowther Committees which relate to craft apprenticeship and training for the building industry, the National Joint Apprenticeship Board for the Building Industry has decided that a wider development of pre-apprenticeship courses would contribute much to the attainment of the objectives of those Committees.

To that end the Board has issued a memorandum to its joint apprenticeship committees urging that steps should be taken, in full collaboration with the education authorities and technical colleges, to provide wherever it is found practicable, full-time pre-apprenticeship courses for intending building apprentices.

Such courses will (*a*) provide school-leavers with an extended period of general education coupled with a sound practical introduction to building; (*b*) assist the industry in ensuring that boys recruited to craft apprenticeships are properly selected, are of the right calibre and are properly distributed between the various trades; and (*c*) assist technical colleges in their provision of facilities for building craft courses by reducing the risk of wastage at later stages.

These pre-apprenticeship courses are not intended to take the place of the normal system of recruitment, but they should provide a valuable supplement to it. The courses are primarily designed for boys leaving school at 15 years of age or shortly afterwards and as they will normally start in September each year, the Board has stressed the importance of encouraging all boys selected for a course to remain at school until the July leaving date.

Boys who satisfactorily complete a course will have the normal period of indentured apprenticeship reduced by one year, and, furthermore, there will be a reasonable guarantee that they will be placed in an indentured apprenticeship.

The Ministry of Education has informed the Board that it is drawing the attention of local education authorities to the proposals and inviting their co-operation with the industry's joint apprenticeship committees in providing facilities for courses wherever desired and practicable.

ILA Foreign Travel Prize. The Institute of Landscape Architects Foreign Travel Prize, 1961, value £100, has been awarded to Mr H. W. Booton, B.ARCH., DIP.LD (Dunelm) [*A*], of the Department of Architecture, Royal College of Science and Technology, Glasgow. Mr Booton proposes to study Muslim Gardens in Spain with particular reference to the relationship of building to planting, siting, planning and design of the garden, use of water and problems of irrigation and plant materials.

The Liverpool School of Architecture Society. The annual dinner of the Liverpool School of Architecture Society will be held at the RIBA, in the Henry Florence Hall, on Friday 10 February at 7 p.m. for 7.30 p.m. The principal guests will be Sir William and Lady Holford. The inclusive charge for sherry, dinner and table wines is £1 10*s*. for members and their guests, and tickets may be obtained from Mr Robert Shaw [*A*], 11 Billing Place, West Brompton, London, SW10.

Institute of Advanced Architectural Studies. York Academic Trust, who are unable at present to appoint to the vacant Directorship of the Institute of Advanced Architectural Studies until the status of the Institute in relation to the University of York has been decided, announce that they have been able to arrange for Mr W. A. Allen, BARCH [*A*], Superintending Architect of the Building Research Station, to act in an advisory capacity until a permanent appointment can be made.

Council for the Preservation of Rural Wales. Mr Clough Williams-Ellis, CBE, MC [*F*], has been appointed Chairman of the CPRW in succession to the late Dr Alwyn Lloyd [*F*]. Mr Williams-Ellis served in this capacity for some 20 years prior to Dr Alwyn Lloyd taking over.

Notes from the Council Minutes

Meeting held on 13 December 1960

Appointment of RIBA Representatives

(*a*) *London University: Architectural Education Committee.* Mr P. G. Freeman [*F*] and Mr A. W. Cox [*F*]. Both are reappointed for a further year from 1 March 1961.

(*b*) *Board of Building Education.* Mr E. D. Mills [*F*] (reappointed for a further year from 1 January 1961).

(*c*) *National Inspection Council for Electrical Installation Contracting and the National Inspection Board.* Mr Thomas Mitchell [*A*] (reappointed).

(*d*) *Tribunal of Appeal* (*London Building Acts, 1930–39*). Mr Frank Scarlett [*F*] (for a further period of three years from 1 January 1961). Mr George Fairweather [*F*].

(*e*) *Society of Housing Managers: Conference on 'Housing in the Welfare State – An Assessment', London, 26–27 January 1961.* Mr L. G. Vincent [*A*].

(*f*) *BSI Committee MEE/85/3 – Drawing Sheet Sizes.* Mr A. Diprose [*A*].

(*g*) *Norfolk and Norwich Association of Architects: RIBA Architecture Bronze Medal Jury (1958–60).* Mr F. M. Widdup [*F*], President, Northamptonshire, Bedfordshire and Huntingdonshire AA.

School of Architecture, University College, Dublin. It was approved that the recognition of the five years' Degree Course for exemption from the RIBA Intermediate and Final Examinations (except Part III, the examination in Professional Practice and Practical Experience), be continued under the usual conditions.

Membership. The following members were elected: as Fellows 9; as Associates 42.

Students. 98 Probationers were elected as Students.

Applications for Reinstatement. The following applications were approved: *Immediate*, as Associates: Peter Cecil Alexander Bynoe, Patrick Napier Campbell-Jones, Hirsh Fish, Hildyard Viry Marinier, Robert Gillespie Meldrum, James Symmers Neish, Basil Andrews Waddington. *From 1 January 1961*, as Associates: Donald Jack Cannon, Christopher Patrick Dardis, Frederick Wilmot Davey, Ian Buchan Fell, Bernard George Green, John Edwin Jackson, Alan Causey Jones, Mrs Kathleen McBretney, Arthur Henry Wilson Mold, Mrs Elizabeth June Parkinson, Terence Edward Saffer, Vernon John Thurgood, James Ralph Wraight; as Licentiate: Alfred Edward Merriott.

Obituary. The Secretary reported with regret the death of the following members: Harry Davenport Dodd [*F*], Francis Henry Heppel [*F*], Henry Alfred Metayers, OBE [*F*], Charles Raymond Towle [*F*], John Reeve Young [*F*], George Checkley [*Retd F*], John Forbes Clark, DFC [*A*], Lawrence Kilner [*A*], Clifford Edward Abbott Lloyd [*A*], William Ernest Emerson [*Retd A*], Hubert Oswald Hawkins [*L*], Frank Cremer [*Retd L*], Arthur Taylor [*Retd L*], Joseph Henry Wyeth [*Retd L*].

By resolution of the Council the sympathy and condolences of the Royal Institute have been conveyed to their relatives.

Obituary

George Checkley *[Retd F]*
died on 7 November 1960.

Professor Stephen Welsh *[F]* writes:

'George Checkley died in Nottingham on the 7 November 1960. He had been ill since the summer of 1948.

'He was born in Akaroa, New Zealand, on the 19 December 1893. After some years as a pupil in the Boys' School, Christchurch, he matriculated in the University of New Zealand in 1911.

'Prior to service for three years in France and Egypt with the NZ Expeditionary Forces during the First World War, he had had one year's training in the office of Cecil Wood *[A]* of Christchurch, followed by one year's architectural study in the University of New Zealand.

'As the holder of a New Zealand Expeditionary Force Scholarship he entered the Liverpool School of Architecture in 1919. There he had a most distinguished career as a student, winning the Holt Travelling Studentship and the first Lever Prize in 1920 and passing in 1921, whilst a fourth year student, the final examination of the RIBA. He graduated BARCH with 1st Class Hons. in Architectural Design in 1922, the year in which this degree first carried with it exemption from the RIBA final examination. In the same year he was awarded a 1st Class Certificate in Civic Design by Liverpool University and won the RIBA Henry Jarvis Studentship. For a thesis and drawings prepared whilst a post-graduate student in the British School at Rome he was awarded the degree of MA by Liverpool University.

'Towards the end of his studies in Rome he accepted an invitation to join the staff of the School of Architecture, Cambridge University, and in 1928 became MA of that University. From 1934–37 he was a member of the staff which laid the foundations for success of the School of Architecture in the Regent Street Polytechnic.

'During his years at Cambridge and London he had a small practice and two of the houses built by him in Cambridge were often illustrated as examples of modern design.

'He became Head of the Nottingham School of Architecture in 1937 and in 1941 the status of the school was raised by RIBA recognition of the five years' course of study which he had established. In 1942 he founded Nottingham's School of Town and Country Planning in recognition of which he was made a Member of the Town Planning Institute.

'Although he was not fond of examining he served as external examiner at King's College, Newcastle upon Tyne, for 1930–32, at Cambridge University for 1932–33 and at Sheffield University for 1941–43.

'Whilst at Cambridge he married Isabel Maud Chambers, AA DIPL., RIBA Silver Medallist 1923 (for students of Recognised Schools of Architecture), whom he met for the first time on her arrival at the British School at Rome as Bernard Webb Student. By his wife's long illness he was greatly distressed and after her death in Nottingham he never appeared to recover from the state of deep depression into which he then fell. Not long afterwards, in 1948, he retired from his post as Head of the Nottingham School.

'Checkley was an intense and assiduous student of architecture who loved teaching. To walk about with him in any town was an object lesson in acute observation and sensibility. His personal contribution to the work of a School of Architecture was, however, confined to studio instruction; he refused to undertake lecturing on any subject. As a teacher he may be said to be the fulfilment of Alexander Pope's dictum, "Let such teach others who themselves excel!"

'At Nottingham he devoted the whole of his energies to the work of his Schools of Architecture and Town and Country Planning and, in both, his work was eminently successful and fruitful. Despite a shy and aloof manner, he gained the affection of his students as a man and their wholesome respect as a teacher.'

Membership Lists

ELECTION: 13 DECEMBER 1960

The following candidates for membership were elected on 13 December 1960.

AS FELLOWS (9)

Alexander: Leslie William Mac Bryde, B.Arch. (L'pool), ARICS, Liverpool.
Challen: William Geoffrey, Dipl.Arch.(UCL).
Chowdhury: (Mrs) Urmila Eulie, B.Arch. (Sydney), Chandigarh, India.
Flatt: Derrick Neeve, MBE, Kitale, Kenya.
Floyd: Michael Pulsford, DFC, Dipl.Arch. (UCL), Dip.TP(Lond.).
Freeman: Roger, AADipl., Kampala, Uganda.
Haward: Birkin, Ipswich.
Master: Peter Henry, Cheam.
Seow: Eu Jin, B.Arch.(Melbourne), Kuala Lumpur, Malaya.

AS ASSOCIATES (42)

Adams: Gordon Stuart, B.Arch.(Univ. of NSW), ASTC(Arch.), Dip.TCP(Sydney), Chatswood, NSW, Australia.
Alden: Edward Arthur, Leigh-on-Sea.
Baranauskas: Leonas, Melbourne, Victoria, Australia.
Benington: Derek Charles, B.Arch.(Rand), Johannesburg, South Africa.
Boyce: Bernard Walter, Dar Es Salaam, Tanganyika.
Collin: Norman, DA(Edin.), Edinburgh.
Collington: Frederick William Luther, Oadby.
Crome: Michael James, Dip.Arch.(Leics), King's Lynn.
Danjoux: Guy Edmond Mathieu, Phoenix, Mauritius.
Downs: Ian Cyril, Dipl.Arch.(Hull), Withernsea.
Goodfellow: Edward Frank, Dip.Arch.(Hammersmith).
Graham: Robert Clarence, Downpatrick, Co. Down, N. Ireland.
Hartland: Richard William.
Hersch: Cecil, B.Arch.(Rand), Johannesburg, South Africa.
Hestelow: Peter Norman, Wahroonga, NSW, Australia.
Jones: (Mrs) Valerie Heather, Dip.Arch. (Wales), Enugu, Eastern Nigeria.
Kleiber: Jan.
Knott: Robert George, Melbourne, Victoria, Australia.
Lee: King Fun, B.Arch.(Melbourne), Parkville, Victoria, Australia.
Lim: Sin-Huat, B.Arch.(Melbourne), Melbourne, Victoria, Australia.
Linden: Arnold Victor, Dip.Arch.(The Polytechnic).
Lochhead: Kenneth James Ludovic, DA (Edin.), Edinburgh.
Loh: Hock Im, Dipl.Arch.(Northern Polytechnic), Penang, Federation of Malaya.
Mitchell: Stanley Anderson, Dip.Arch.(Abdn), Elgin.
Nash: Philip John.
Ossher: David Nathan, B.Arch.(Rand), Johannesburg, South Africa.
Paulick: (Miss) Joen Kerr, DA(Edin.), Edinburgh.
Philippou: Andreas, Dip.Arch.(Hammersmith), Nicosia, Cyprus.
Rolland: Lawrence Anderson Lyon, DA (Dundee), Leven.
Sampson: Bernard Rushton, Causeway, S. Rhodesia.
Sargent: George Roger, Dip.Arch.(Auck.NZ), Auckland, New Zealand.
Seah: Peng Chua, B.Arch.(Melbourne), Telok Jurau, Singapore.
Simpson: Neil Victor Ridgley, Dip.Arch. (Abdn), Edinburgh.
Smith: Ronald Stewart, B.Arch.(Melbourne).
Smith: William Fergus, DA(Edin.), Edinburgh.
Teng: (Miss) Khoon Lan, Andover.
Toh: Keng Chuan, B.Arch.(Melbourne), Singapore.
Tope: Prabhakar Krishna, Nagpur, India.
Tyler: Adrian Walter, Dipl.Arch.(Northern Polytechnic).
Willox: Eric, Dip.Arch.(Abdn), Aberdeen.
Young: Set Ngai, Hong Kong.
Zouves: George, B.Arch.(Rand), Kimberley, South Africa.

ELECTION: 7 FEBRUARY 1961

An election of candidates for membership will take place on 7 February 1961. The names and addresses of the candidates found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, RIBA, not later than Monday 16 January 1961.

The names following the applicant's address are those of his proposers.

AS FELLOWS (5)

Barr: Albert William Cleeve, Dipl.Arch. (Northern Polytechnic), Chief Architect, Ministry of Housing and Local Government, Whitehall, SW1; 49 Brookland Rise, NW11. H. J. Whitfield Lewis, Prof. Robert H. Matthew, Prof. Sir William Holford.

Dannatt: James Trevor, Dip.Arch.(The Polytechnic), 115 Crawford Street, W1; 33 St Mary's Grove, N1. Prof. Sir Leslie Martin, Percy B. Dannatt, Miss Jane B. Drew.

Gray: Maxwell Camplin, MBE, B.Arch. (Auck.NZ), 40 Bedford Street, Strand, WC2; 48 Dorking Road, Bookham, Surrey. E. Howard Sadler, F. J. Searley, Alan L. Luke.

Moss: Michael Frederick Harper, 7 Derby Terrace, Derby Road, Nottingham. J. Gordon Woollatt, T. N. Cartwright, A. E. Eberlin.

and the following Licentiate who is qualified under Section IV, Clause 4 (c) (ii) of the Supplemental Charter of 1925:

Shea: Francis Matthew, 6 Cecil Square, Margate, Kent; West Northdown Cottage, Omer Avenue, Cliftonville, Kent. W. R. H. Gardner, E. T. Ashley Smith, J. E. Jackson.

AS ASSOCIATES (173)

Adams: Brian Rhoderic, AADipl., 14 Claremont Crescent, Edinburgh 7. Arthur Korn, Prof. Robert H. Matthew, Thomas E. North.

Agabeg: George Raymond, 21 Albert Grove, Wimbledon, SW20. Peter Chamberlin and applying for nomination by the Council under Bye-law 3*(d)*.

Alderson: John Noble, Dipl.Arch.(Leeds), 282 Todmorden Road, Burnley, Lancashire. John R. Harris, F. Chippindale, K. Turner.

Allen: Frank David, 9 Queen's Walk, Harrow, Middlesex. A. Edward Hughes, G. W. Banfield, G. B. Drury.

Altman: Frank Rendel, 31 Park Road, Gt Sankey, Warrington, Lancs. H. T. Seward, Cecil Stewart, Leonard C. Howitt.

Arundel: Humphrey Everard, B.Arch.(Sydney), c/o Commercial Banking Co. of Sydney, West End Branch, 40–50 Berkeley Street, W1. Prof. H. Ingham Ashworth, Prof. Denis Winston, William R. Laurie.

Ashfold: Bernard Alfred, ARICS, 1 Farm Field, Devereux Drive, Watford, Herts. S. G. Lawrence, Kenneth M. Winch, Norman Keep.

Ballantyne: Edward Brown, DA(Dundee), 34 Stratheden Place, Auchtermuchty, Fife, Scotland. Chessor Matthew, A. F. S. Wright, W. S. Gauldie.

Bargh: John Geoffrey, MA(Cantab.), B.Arch.(Manitoba), B.Sc.(Eng.)(Nottm), Dip. TP(Glas.), 42 Queensway, Bayswater, W2. Applying for nomination by the Council under Bye-law 3(*d*).

Barton: Arthur James Eustace, 32 Silverknowes Parkway, Edinburgh 4. Applying for nomination by the Council under Bye-law 3(*d*).

Bates: Donald, 34 Savile Drive, Halifax, Yorkshire. Norman Culley, J. Gordon Berry, C. Sunderland.

Beach: Leslie John, 57 Watchfield Court, Chiswick, W4. Lt-Col. A. E. Henson, S. H. Statham, S. Clough.

Behl: Surender Mohan, Dipl.Arch.(Oxford), 31 Polstead Road, Oxford. The Hon. Lionel Brett, F. T. Pritchard, Reginald Cave.

Bell: Joseph Raymond, 'Renboga', Roman Road, Broadstone, Dorset. Lionel E. Gregory, A. J. Seal, Ronald R. Phillips.

Bell: William Methven, DA(Dundee), 8 Gibb's Lane, Lochee, Dundee, Angus. Chessor Matthew, W. S. Gauldie, A. F. S. Wright.

Bendelow: Irvine John Edward, Dipl.Arch. (UCL), 37 Wentworth Road, Golders Green, NW11. R. C. White-Cooper, Prof. H. O. Corfiato, A. M. Foyle.

Benson: John Bernard, Dipl.Arch.(UCL), 101 King Henry's Road, NW3. Peter Chamberlin and applying for nomination by the Council under Bye-law 3(*d*).

Blackwood: Brian George William, Linden, Linden Park, Tunbridge Wells, Kent. Cecil Burns, Charles J. Cable, F. R. Pite.

Blades: Brian Frost, 89 Brookfield Road, Bedford. J. C. Barker, W. G. Walmsley, S. Vincent Goodman.

Bourne: Kenneth Bernard, 2 Lytton House, Queenswood Avenue, Hampton, Middlesex. Paul Nightingale, Dr R. Herz, Arthur Korn.

Bousell: Roy Ernest, 96 Surrenden Road, Brighton 6. K. E. Black, R. F. Daviel, A. Llewellyn Smith.

Boyd: William Brian Patton, 10 Mount Charles, Belfast 7. D. A. Shanks, B. Cowser, Val Smith.

Bradley: Peter John Richard, Dip.Arch.(The Polytechnic), 66 Flower Lane, Mill Hill, NW7. John S. Walkden, Clive Pascall, Alexander Flinder.

Britton: Peter John, AADipl., 'Blackheath Lodge', Blackheath, Colchester, Essex. Arthur Korn, Anthony Cox, Harold Conolly.

Brown: Geoffrey, 18 Keith Road, Lillington, Leamington Spa. P. Dickenson, Arthur Ling, L. A. Clarke.

Brown: Ian Clement, Dip.Arch.(Dunelm), 3 Westbourne Avenue, Gosforth, Newcastle upon Tyne 3. H. Wharfe, Prof. J. H. Napper, Bruce Allsopp.

Burrows: Thomas Norman, Flat 8, 99 Park Road, Blackpool. H. T. Jackson, Halstead Best, C. H. MacKeith.

Buss: Roger Michael, 59 Kenwood Gardens, Ilford, Essex. Applying for nomination by the Council under Bye-law 3(*d*).

Campbell: Ian Gordon, 19 Stonefield Drive, Paisley, J. Steel Maitland, Samuel McColl, Prof. F. Fielden.

Campion· David Goring, BA(Arch.)(Lond.), The Firs, Old Catton, Norwich, Norfolk. R. C. White-Cooper, H. F. Hoar, A. M. Foyle.

Chan: Arthur Fai-Tong, B.Arch.(Manitoba), Dip.TP(Glas.), 45 Elms Road, SW4. Hubert Bennett, F. G. West, Edwin Williams.

Chandawarkar: Yatindra Marutiro, 9 Twyford Avenue, W3. O. Garry, R. Jelinek-Karl, Edwin Williams.

Cherrill: John Oliver, 3 Grove Orchard, Highworth, near Swindon, Wiltshire. P. W. Edwards, R. E. E. Beswick, A. D. Kirby.

Cocks: Brian John, Dipl.Arch.(UCL), 91 Cobbold Road, Felixstowe, Suffolk. R. C. White-Cooper, C. H. Elsom, H. F. Hoar.

Collerton: Alexander, B.Arch.(Dunelm), 123 Rothbury Terrace, Heaton, Newcastle upon Tyne 6. Prof. J. H. Napper, H. Wharfe, Bruce Allsopp.

Collier: James, 9 Eslington Terrace, Newcastle upon Tyne 2. Prof. J. H. Napper, Bruce Allsopp, H. Wharfe.

Cooper: Denis, 37 Lyonsdown Road, New Barnet, Herts. W. Chas. Waymouth, C. G. Bath, S. F. Burley.

Cowen: Cyril Norman, 27 Hailsham Avenue, SW2. Kenneth M. Winch, C. G. Bath, W. F. Howard.

Cowland: Sydney George, 'Hillcrest', Joiners Lane, Chalfont St Peter, Bucks. Paul Nightingale, Arthur Korn, Dr R. Herz.

Cox: John, BA(Arch.)(Lond.), 55A Crawford Street, W1. Frankland Dark, Thomas A. Eaton, Edward Playne.

Creedon: Robert Christopher, 11 Richview Park, Richmond Avenue South, Rathmines, Dublin. Vincent Kelly, J. V. Downes, J. G. Butler.

Croft: Herbert Kemble, 67 Combe Park, Bath. Eustace H. Button, Kenneth Nealon, T. H. B. Burrough.

Crummett: Peter Alan, 27 Grove Lane, Cheadle Hulme, Cheadle, Cheshire. Cecil Stewart, Leonard C. Howitt, H. T. Seward.

Cuthbert: Peter George, Dipl.Arch.(Northern Polytechnic), Messrs Eric Firmin and Partners, Thavies Inn House, 5 Holborn Circus, EC1. C. G. Bath, E. H. Firmin, Sidney Kaye.

Daniels: Jack Edwin James, 34 Sydney Road, Bexleyheath, Kent. E. B. Musman, John E. M. Macgregor, Hamish E. D. Adamson.

Davidson: Colin Philip, Dipl.Arch.(Northern Polytechnic) Flat No. 1, 22 Denmark Road, Goucester. C. G. Bath, S. F. Burley, J. E. Moore.

Davies: David Thomas Idwal Griffith, BA (Oxon), BA, Dipl.Arch.(Cantab.), 2 Short Street, Cambridge. Prof. Sir Leslie Martin, Peter Bicknell, David Roberts.

Davies: George Walter James, 13 Follett Drive, Abbots Langley, Herts. Applying for nomination by the Council under Bye-law 3(*d*).

Davis: Eric Richard, 19 Elstree Avenue, Vicar's Cross, Chester. Arthur C. Bennett and applying for nomination by the Council under Bye-law 3(*d*).

Davis: Maurice Edwin William, 568 Banbury Road, Oxford. F. T. Pritchard, Thomas Rayson, Reginald Cave.

Davison: John David, Dip.Arch.(The Polytechnic), 'Rathmore', 31 The Chase, Eastcote, Pinner, Middlesex. John S. Walkden, H.Werner Rosenthal, Peter Goodridge.

Deeley: Ronald William, 56 Levendale Road, Forest Hill, SE23. Frederick Jones, Miss J. E. Townsend, C. G. Bath.

Degler: Zenon Czeslaw, 20 Far Meadow Lane, Irby, Wirral, Cheshire. Lt-Col. Ernest Gee, T. Noel Mitchell, Dr Ronald Bradbury.

Deighton: Gerald Kenneth Thomas, 'Crossways', Eton Road, Datchet, Bucks. Stanley G. Soper, George Lowe and applying for nomination by the Council under Bye-law 3(*d*).

Denning: Norman Eric, 18 Dovedale Road, Beacon Park, Plymouth. Andrew Renton, Sir Basil Spence, Allan Johnson.

Dinnis: Francis Buchan, DA(Edin.), Kellerstain, Gogar, Edinburgh 12. H. S. Macdonald, W. H. Kininmonth and applying for nomination by the Council under Bye-law 3(*d*).

Dodds: Alan John, 4 Mayfair Avenue, Whitefield, Manchester. C. P. Williams, Cecil Stewart, Leonard C. Howitt.

Donald: Kenneth, 8 Orchard Gardens, Chester-le-Street, Co. Durham. J. C. Smith, E. W. Blackbell, W. Eric Dow.

Dryburgh: Kenneth Andrew, South Lodge, Summers Road, Farncombe, near Godalming, Surrey. Ivan F. Roberts, R. Duncan Scott, Graeme I. C. Highet.

Edmonds: Norman Alfred, ARICS, 40 The Ruffets, Croham Valley Road, South Croydon, Surrey. E. H. Firmin, Sidney Kaye, Lt-Col. Wallace J. Gregory.

Ellis: Gordon William, 12 Salisbury Road, Cosham, Portsmouth, Hants. Frank Mellor, A. C. Townsend, C. W. Wilkins.

Everitt: Michael Boswell, Dip.Arch.(Leics.), 3 Greetwell Road, Lincoln. Applying for nomination by the Council under Bye-law 3(*d*).

Farmery: Ian Hugh, 83 Leeds Road, Selby, Yorks. J. Konrad, W. Gregory Wilson, T. P. Taylor.

Farquhar: Ian Copland, Dip.Arch.(Abdn), 77 Murray Terrace, Aberdeen. E. F. Davies, A. B. Gardner, John Maclennan.

Fearnley: John Vickers, 3 Baginton Road, Coventry, Warwickshire. Arthur Ling, F. B. Pooley, Maurice Harris.

Ferguson: Hugh Crawford Stewart, DA (Glas.), 9 Niddrie Square, Glasgow, S2. Prof. F. Fielden, Prof. William J. Smith, A. D. Cordiner.

Frampton: Kenneth Brian, 60 Hogarth Road, SW5. H. J. Whitfield Lewis, M. H. Cooke-Yarborough, J. M. Grice.

French: Peter James, 30 Penhill Road, Lancing, Sussex. Stanley H. J. Roth, E. A. S. Houfe, Frederick Jones.

Galberg: George Joseph, Messrs Galberg and Weal, 15 Cleveland Square, W2. J. M. Scott and applying for nomination by the Council under Bye-law 3(*d*).

Gillespie: James McRitchie, DA(Dundee), 3 Gibb's Lane, Dundee, Scotland. T. H. Thoms, Donald Ross, A. F. S. Wright.

Gilmore: William James, 36 Hills Road, Buckhurst Hill, Essex. Kenneth M. Winch and applying for nomination by the Council under Bye-law 3(*d*).

Goodall: John Keith, 9 Brunswick Drive, Dewsbury, Yorkshire. J. Smith, F. Chippindale, K. Turner.

Grant: Peter, Dip.Arch.(Abdn), 140 Forest Avenue, Aberdeen. E. F. Davies, John Maclennan, D. J. A. Ross.

Gray: Peter Desmond, 5 Pixham Court, Lake Road, Wimbledon, SW19. Ronald Ward, Allan Johnson, N. Seton Morris.

Griffith: Dennis, 3 Bankside, 21 Ferry Road, Teddington, Middlesex. Peter Cocke, C. K. Capon, Anthony Cox.

Grubb: Geoffrey Edward, Flat 8, Hillcairnie, St Andrew's Road, Droitwich, Worcs. L. C. Lomas, W. Usher, M. W. Jones.

Hall: Peter Michael, Dip.Arch.(Sheffield), 42 Overton Road, Middlewood, Sheffield 6. Prof. Stephen Welsh, J. Lewis Womersley, Prof. John Needham.

Harding: Clarence Mortimore, 9 Northumberland Avenue, Aylesbury, Bucks. Raymond C. White, F. B. Pooley, F. A. C. Maunder.

Hargreaves: Michael John, BA(Arch.) (Lond.), 17 Crook Log, Bexleyheath, Kent. A. M. Foyle, R. C White-Cooper, H. F. Hoar.

Harrison: Godfrey, 6 Bradbourne Street, SW6. T. A. Page, P. Raymond Bee, H. Kellett Ablett.

Harvey: Gerald Peter, 22 Chester Terrace Mews, Regent's Park, NW1. Thomas A. Eaton, Frankland Dark, N. F. Cachemaille-Day.

Hastings: Francis Nisbet, DA(Edin.), 18 Wardenlaw Heworth, Gateshead 10, Co. Durham. Applying for nomination by the Council under Bye-law 3(*d*).

Hawkins: Geoffrey John, 21 Sidney Road, St Margarets, Twickenham, Middlesex. The Hon. Lionel Brett, C. H. Elsom, W. F. Howard.

Heelis: Gordon, 16 Greenland Avenue, Kingsway, Derby. Thos. W. East, George I. Larkin, S. Morrison.

Herman: Abraham, Dip.Arch (Hammersmith), Flat 5, 75 Holden Road, Finchley, N12. Paul Nightingale, Dr R. Herz, David Morrison.

Hickman: Anthony Stanley Franklin, D.Arch. (Kingston), 3 Wargrave Hall, Wargrave, Berks. Applying for nomination by the Council under Bye-law 3(*d*)

Hill: Donald Stirling, 22 Aske Road, Redcar, Yorks. Applying for nomination by the Council under Bye-law 3(*d*).

Honer: John David, 50 Compton Road, Wimbledon, SW19. Peter Chamberlin and applying for nomination by the Council under Bye-law 3(*d*).

Hudson: Keith Edwin, Morden Park Cottage, Morden, Wareham, Dorset. Frankland Dark, Thomas A. Eaton, C. G. Bath.

Hunter: James, 20 Percy Street, Liverpool 8. Applying for nomination by the Council under Bye-law 3(*d*).

Hyland: Anthony David Charles, BA(Arch.) (Lond.), 22 Castlemaine Avenue, South Croydon, Surrey. R. C. White-Cooper, H. F. Hoar, A. M. Foyle.

Ireland: David, DA(Dundee), 216 Old Glamis Road, Dundee. Chessor Matthew, T. H. Thoms, W. S. Gauldie.

Isaac: Alan Reginald George, 33 Victoria Avenue, Redfield, Bristol 5. T. J. Lynch, Eustace H Button, Angus McDonald.

Jack: Matthew Dudgeon, 32 Back Road, Dollar, Clackmannanshire. Applying for nomination by the Council under Bye-law 3(*d*).

Janssens: Garth Warren, Dip.Arch.(The Polytechnic), 68 Fraser Road, Perivale, Greenford, Middlesex. Applying for nomination by the Council under Bye-law 3(*d*).

Jeavons: Gordon Righton, 450 Lichfield Road, Wednesfield, Wolverhampton. G. Alan G. Miller, Kenneth A. Lloyd, J. F. R. Gooding.

Joel: Stephen Victor, 1 Waterloo Place, North Shields, Northumberland. Prof. J. H. Napper, Geo. H. Gray, William Stockdale.

Jones: Graham Harold, 22 Warren Drive, Chelsfield, Farnborough, Kent. A. Vivian Banks, Harold W. E. Lindo, C. G. Bath.

Jones: William Lindsay Garner, Dipl.Arch. (UCL), 58 Sudbury Court Drive, Harrow, Middlesex. Sydney Gregson, R. C. White-Cooper, A. M. Foyle.

Joubert de la Ferte: (Miss) Annette, Dip. Arch.(The Polytechnic), 31 Summerfield

Avenue, NW6. Alister MacDonald, John S. Walkden, Frederick Gibberd.

Kennard: Robin Anthony, Dip.Arch.(R W A), The Flat, Lee's Farm, Stoke St Gregory, Taunton, Somerset. C. Bacon, Clement G. Toy and applying for nomination by the Council under Bye-law 3(*d*).

Kinlock: Ian Watson, 7 Torbreck Street, Glasgow, SW2. A. G. Jury, Prof. F. Fielden, George F. Shanks.

Knowles: Wallace Charles, A R I C S, Cranley Moss, Queens Road, Burwood Park, Walton-on-Thames, Surrey. Arthur H. Ley, Alan L. Luke, Frederick Barber.

Lane: Edward Ronald, B A(Arch.)(Lond.), Knoll House, Staplehurst, Tonbridge, Kent. R. C. White-Cooper, Charles W. J. Smeed, Arthur M. Foyle.

Leader: Douglas Ernest, Dip.Arch.(The Polytechnic), Grange View, Mottingham Lane, SE9. Applying for nomination by the Council under Bye-law 3(*d*).

Lewis: Glanfyll Lloyd Richards, 47 Lowshoe Lane, Collier Row, Romford, Essex. Applying for nomination by the Council under Bye-law 3(*d*).

Logan: George, 9 Orchard Terrace, Chester-le-Street, Co. Durham. Prof. J. H. Napper, H. Wharfe, Bruce Allsopp.

Luckhurst: David James Francis, B A(Arch.) (Lond.), Ormiston Lodge, Bunch Lane, Haslemere, Surrey. Prof. H. O. Corfiato, Sir Hugh Casson, H. J. Orchard.

Lutomski: Miroslaw, 100 Lochdochart Road, Glasgow, E3. J. A. Coia, Prof. F. Fielden, Ninian Johnston.

McDavitt: Robert Gale, Dipl.Arch.(Northern Polytechnic), 23 Highworth Close, High Wycombe, Bucks. C. G. Bath, H. K. Wakeford, Charles J. Jerram.

McIlwaine: Derek Esler, 12 Heatherlea Avenue, Portstewart, Co. Derry, N. Ireland. R. H. Gibson, E. D. Taylor, A. F. Lucy.

Marsh: Michael John, Copplestone 3, 13 Trewartha Park, Weston-super-Mare, Somerset. R. Nicholls, J. Ralph Edwards, Harold Jones.

Meldrum: Ian Edward Alexander, 'Hillside', Ghyll Beck Drive, Layton Lane, Rawdon, near Leeds. F. Chippindale, G. Davy, Noel Pyman.

Mew: Victor John, Dip.Arch.(Hammersmith), 97 St Michael's Road, Sheerwater, Woking, Surrey. Paul Nightingale, Dr R. Herz, Edwin Rice.

Miller: Rex Antony, 150 Brunswick Road, Ipswich, Suffolk. Martin J. Slater, J. T. Adams and applying for nomination by the Council under Bye-law 3(*d*).

Millis: Arthur Peter, 28 Maesteg Road, Tondu, Bridgend, Glamorgan. J. H. Alleyn, C. G. Tagholm, O. S. Portsmouth.

Moon: Gordon Ivor, Dipl.Arch.(Leeds), 'Eureka', Farrar Lane, Adel, Leeds 16. F. Chippindale, J. Sheridan-Shedden, F. L. Charlton.

Morgan: David John, Dip.Arch.(The Polytechnic), Whitegate, 12 Rose Walk, Radlett, Herts. Applying for nomination by the Council under Bye-law 3(*d*).

Mortimer: Kenneth Charles, 10 Clement Place, Barry, Glamorgan. Lewis John, Gerald Stanley, C. F. Jones.

Murray: Charles Russell, 'Westwinds', 71 Curriehill Road, Currie, Midlothian. W. H. Kininmonth, J. S. Johnston, J. Roy McKee.

Nesbitt: John Albert, 20 Ormesby Drive, Potters Bar, Middlesex. Norman Green, Elidir L. W. Davies, Alan Devereux.

Neylan: Michael Christopher, 8 Worple Avenue, Wimbledon, SW19. Peter Chamberlin, Paul Nightingale, Dr R. Herz.

Nicholas: Leonard Albert, 53 Spencer Road, Langley, Bucks. Kenneth Anns, Herbert J. Stribling, W. David Hartley.

Nicholls: Anthony David, 54 Goodrest Avenue, Quinton, Birmingham 32. Reginald L. Stone, Leonard J. Multon, A. Douglas Jones.

O'Connor: (Miss) Eileen Mary, 4 St Francis Street, Galway, Ireland. William A. Maguire, Wilfrid Cantwell, Patrick J. Munden.

O'Connor: Michael, Flat 1. 43 Wakefield Road, Pontefract. Frank Chippindale, K. Turner, Brian Hallwood Lingard.

Owen: Leslie, 17 The Avenue, Horsforth, near Leeds, Yorks. H. Webster, F. Chippindale, Kenneth Turner.

Palmer: Peter John Jordan, B A(Arch.) (Lond.), 73 Jamestown Road, NW1. Douglas W. Rowntree, R. C. White-Cooper, A. M. Foyle.

Parry: Edward Chapman, 6 Walsden Grove, Burnley, Lancs. John Taylor, Cecil Stewart, L. C. Lomas.

Pooley: Norman Grierson, 'Hythe', 30 Bell View, Windsor, Berks. A. Vivian Banks, Harold W. E. Lindo, Frederick Jones.

Portbury: Alan Frederick, 22 Cillocks Close, Hoddesdon, Hertfordshire. H. K. Wakeford, Charles J. Jerram, Michael Brashier.

Pradham: Anant Vinayak, 20 Pembridge Crescent, W11. Cyril G. Pinfold, Z. Sirotkin, R. Taunton Boutall.

Preston: David Ian, 28 Eccleston Square, SW1. G. W. Knight, Prof. H. O. Corfiato, S. H. Loweth.

Price: Edward David Bryan, Dip.Arch. (Sheffield), 31 Headland Drive, Crosspool, Sheffield 10. Prof. Stephen Welsh, Prof. John Needham, J. Lewis Womersley.

Price: Joseph Francis, 1 Manor Grove, Patchway, Bristol. Eric Ross, T. H. B. Burrough, R. Towning Hill.

Pritchard: Richard Alfred, Dipl.Arch.(Canterbury), 31 Belsize Park Gardens, NW3. J. Alan Slater, R. H. Uren and applying for nomination by the Council under Bye-law 3(*d*).

Prosser: David Ivor, Ground Floor Flat, 124 Edward Road, West Bridgford, Nottingham. Peter Bartlett, J. W. H. Barnes, Colin Gray.

Rawson: Francis Keith, 7 Ringshall, Berkhamsted, Herts. J. W. M. Dudding and applying for nomination by the Council under Bye-law 3(*d*).

Renhard: John Thomas, 42 Wolverton Road, Rednal, Birmingham. J. Seymour Harris, Reginald L. Stone, Cyril F. Martin.

Ridgett: John William, 28 Usk Road, Tilehurst, Reading, Berks. C. H. A. Willett, A. G. Armstrong, T. L. J. Chamberlain.

Roberts: John Anthony, Dipl.Arch.(Leeds), 52 Hemberton Road, SW9. F. Chippindale, K. Turner, Hubert Bennett.

Routledge: James Harry, 24 Buchlyvie Road, Ralston, Paisley. James Taylor, Prof. F. Fielden, George F. Shanks.

Rudowski: Leszek, Argyll Mansions, Hammersmith Road, W14. Applying for nomination by the Council under Bye-law 3(*d*).

Sexton: John Raymond, Old Chequers Cottage, Chequers Lane, Prestwood, near Great Missenden, Bucks. Paul Nightingale, Dr R. Herz, A. R. Borrett.

Simpson: Alan Frank, Dipl.Arch.(Leeds), 126 Alder Avenue, Widnes, Lancs. F. Chippindale, K. Turner, Alan Chambers.

Simpson: (Mrs) Diana Barr, Dipl.Arch. (Leeds), 126 Alder Avenue, Widnes, Lancs. F. Chippindale, K. Turner, Alan Chambers.

Smith: Harold, 'Daleview', Rivock Avenue, Utley, Keighley, Yorks. Applying for nomination by the Council under Bye-law 3(*d*).

Smith: John Peter, 77 Grange Crescent, Riddlesden, Keighley, Yorks. Applying for nomination by the Council under Bye-law 3(*d*).

Smith: Raymond Caroll, 118 Withersfield Road, Haverhill, Suffolk. E. B. Parkinson, Marshall A. Sisson, A. C. Crook.

Spawforth: Peter David, Dipl.Arch.(Leeds), 20 Heath Rise, Beeston, Leeds 11. F. Chippindale, K. Turner, W. C. Brown.

Stenhouse: George Alexander, D A(Edin.), 6 Gladstone Terrace, Burntisland, Fife. R. Forbes Hutchinson, J. Holt, E. Riss.

Stovin-Bradford: Frank Randolph, The Red House, Market Square, Amersham, Bucks. Douglas Wood, Edgar R. Taylor, J. C. Wood.

Sutton: Donald Eric, B.Arch.(L'pool), 14 Limont Road, Ainsdale, Southport, Lancs. Prof. R. Gardner-Medwin, Prof. H. Myles Wright, Prof. Sir William Holford.

Swaine: Richard Carter, 296 Northgate, Cottingham, Hull, East Yorkshire. Ronald Ward, A. S. Gray, Norman Royce.

Swanson: Mackie Bruce, 338 Easter Road, Leith, Edinburgh 6. John Holt, R. Forbes Hutchison, J. S. Johnston.

Taylor: Ernest Norman, 4 Parkthorne Close, North Harrow, Middlesex. W. G. Plant, Richard F. M. Mellor, F. A. C. Maunder.

Taylor: Lionel Frederick, Dip.Arch.(The Polytechnic), 17 Cascade Avenue, N10. Applying for nomination by the Council under Bye-law 3(*d*).

Taylor: Stephen Douglas, 6 Sleaford Green, South Oxhey, Herts. Hubert Bennett, Edwin Williams, R. Wallace-Bateman.

Totterdill: John Wallis, M C D, B.Arch. (L'pool), 62 Pembroke Road, Clifton, Bristol 8. Prof. R. Gardner-Medwin, Eric Ross, Prof. H. Myles Wright.

Ungless: William Francis, Dipl.Arch.(U C L), 31A Kildare Terrace, Bayswater, W2. R. C. White-Cooper, H. F. Hoar, Charles W. J. Smeed.

Walden: Derek Walter James, 136 London Road, Chelmsford, Essex. Roff Marsh, S. E. Bragg, R. A. Boxall.

Waller: Grant, Dipl.Arch.(Northern Polytechnic), 9 Chestnut Close, Southgate, N14. C. G. Bath, S. F. Burley, J. E. Moore.

Wallis: Alan Victor, 1 Wood View Drive, Fagley, Bradford 2, Yorks. Applying for nomination by the Council under Bye-law 3(*d*).

Warner: Brian, 6 Field March, Willenhill Wood, Coventry. Arthur Ling, Maurice Harris, Edward T. Baldwin.

Way: John Lewis, 18 Laurel Avenue, Blackpool, Lancs. H. Hurst Smith, Cecil Stewart, F. Leslie Halliday.

Wenczek: Erwin Bruno Otto, 46 Walsh Avenue, Hengrove, Bristol 4. W. H. Watkins, A. S. Gray, R. Fraser Reekie.

White: David Herman, 'Dunvegan', Brent Knoll, near Highbridge, Somerset. F. N. Brayshaw, S. W. Swanston, Harold Jones.

Wild: Leonard Alan, 4 Withnell Road, Kingsway, Manchester 19. Cecil Stewart, J. H. Bourne, Leonard C. Howitt.

Wilson: (Mrs) Gillian Elizabeth, Dipl.Arch. (Oxford), 8 Lyme Farm Road, SE12. Gerald Banks, F. T. Pritchard, Reginald Cave.

Wilson: Terrance, The Bungalow, 105 Woodfield Drive, Harrogate, Yorks. F. Chippindale, K. Turner, James Cubitt.

Wodehouse: Lawrence Michael, Dip.Arch. (Dunelm), 50 Marlborough Road, Norwich, Norfolk. Prof. J. H. Napper, Bruce Allsopp, H. Wharfe.

Yeo: (Miss) Alice Yong Soo, 26 Hartington Court, Lansdown Way, SW8. Ellis E. Somake, D. Nightingale, A. M. Gear.

Zehetmayr: (Miss) Jean Frances, 29 Stanley Road, Northwood Hills, Middlesex. Herbert J. Stribling, R. Vaughan, Ralph Tubbs.

ELECTION: 11 APRIL 1961

An election of candidates for membership will take place on 11 April 1961. The names and addresses of the candidates found by the Council to be eligible and qualified in accordance with the Charter and Bye-laws, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary, RIBA not later than Friday 31 March 1961.

The names following the applicant's address are those of his proposers.

AS FELLOW (1)

Beaton: John Ronald, Dip.Arch.(Abdn), Ministry of Transport and Works, Buildings Branch, PO Box 967, Lusaka, Northern Rhodesia. Peter D. Lawson, A. Lloyd Spencer, Clifford Duke.

AS ASSOCIATES (11)

Bhogal: Ajit Singh, Dip.Arch.(Melbourne), 58 Wellington Street, St Kilda, Melbourne, Australia. Harry Winbush, Leslie M. Perrott, Prof. Brian B. Lewis.

Carter: William John, B.Arch.(Rand), PO Box 513, Nelspruit, Transvaal, South Africa. Applying for nomination by the Council under Bye-law 3(*d*).

Fairfield: Robert C., B.Arch.(Toronto), 120 Eglinton Avenue East, Toronto, Ontario, Canada. Applying for nomination by the Council under Bye-law 3(*d*).

Finney: John Brett, 22 Wyong Road, Mosman, NSW, Australia. W. P. R. Godfrey, Harold Bartlett, James F. D. Scarborough.

Ho: Kian Chin, B.Arch.(Melbourne), 622 North Bridge Road, Singapore 7. Prof. Brian B. Lewis, R. G. Parker, Mrs Hilary Lewis.

March: Ronald John, 168 John Street South, Hamilton, Ontario, Canada. Applying for nomination by the Council under Bye-law 3(*d*).

Maucorps: Philippe Jean Louis Helion, B.Arch.(CT), Zagazig, 64 Orchard Street, Newlands Cape, South Africa. Prof. L. W. Thornton White, H. Niegeman, Sir Hugh Casson.

Melman: Cyril Errol, B.Arch.(Rand), 67 Curban Street, Balgowlah Heights, Sydney, Australia. Applying for nomination by the Council under Bye-law 3(*d*).

Meyer: Nicolaas Gerhardus, B.Arch.(Pretoria), c/o Messrs Meiring, Naude, Papendorf and V. D. Morwe, Southern Life Building, St Georges Street, Cape Town, South Africa. Applying for nomination by the Council under Bye-law 3(*d*).

Nance: Alan Lindesay, B.Arch.(Melbourne), 24 Kerferd Road, Glen Iris, SE6, Melbourne, Australia. Prof. Brian B Lewis, Best Overend, Mrs Hilary Lewis

Tan: Eng Keong, Dipl.Arch.(U C L), 101 Tanjong Tokong Road, Penang, Malaya. R. C. White-Cooper, Arthur M. Foyle, H. F. Hoar.

Members' Column

This column is reserved for notices of changes of address, partnerships vacant or wanted, practices for sale or wanted, office accommodation, and personal notices other than of posts wanted as salaried assistants for which the Institute's Employment Register is maintained.

APPOINTMENTS

Mr J. E. Barragan [*A*] has been appointed a Senior Assistant Architect in the Borough Architect's Department, Luton. He has changed his private address to 4 Rockley Road, Luton, Bedfordshire.

Mr C. Heathcote [*A*], Assistant City Architect to the City of Norwich Corporation, has been appointed Deputy City Architect. He succeeds **Mr C. J. Tomkins** [*F*], who has retired. **Mr J. H. Pogson** [*A*], at present Chief Assistant Architect (Education) Norwich C B C succeeds Mr Heathcote as Assistant City Architect.

Mr S. G. Rich, MRAIC, MTPIC [*A*] has been appointed Director of Planning for the Metropolitan Planning Commission of Greater Winnipeg, Manitoba, Canada.

Mr Francis A. Williams [*A*], Chief Assistant Architect at Solihull, has been appointed Deputy Borough Architect of Darlington. He succeeds **Mr Vinton Hall** [*A*] who has become Borough Architect at Colchester.

Mr F. D. W. van Zyl [*A*] has been appointed a Lecturer at the University of Sydney, and his address is now The Department of Architecture, The University of Sydney, Sydney, Australia.

PRACTICES AND PARTNERSHIPS

Messrs Burrough and Hannam [*FF*] of Bedford House, 23 Richmond Hill, Bristol 8, have taken into the firm as associates, **Mr Maurice A. Chapman** [*A*], **Mr Brian M. G. Parkinson** [*A*] and **Mr John K. Gabb** [*A*].

Messrs W. D'Arcy Cathcart [*F*], **R. D'Arcy Cathcart** [*A*], **J. W. Creasy** [*A*] and **B. W. Fothergill** [*A*] have taken **Mr C. S. Neill,** Dip.Arch.(Edin.) [*A*] into partnership in their Northern Rhodesian practice with effect from 1 August 1960. The style of the firm remains **W. D'Arcy Cathcart and Son, Creasy and Fothergill.**

Mr Alan Chambers [*F*] has dissolved partnership with **Mr Z. Borys** of **Nickson and Borys and Partners,** Lagos, Accra and Freetown, and has returned to the United Kingdom to commence practice under the style of **Alan Chambers and Associates,** at Imperial Chambers, 2 Grimshaw Street, Burnley, Lancs., where he would be pleased to receive trade literature.

Mr Robert T. Hodgson [*A*] has entered into partnership with **Mr G. D. Stewart.** The style of the firm is **Messrs Stewart and Hodgson,** 66 Albion Street, Cheltenham (Cheltenham 4408).

Messrs Honeyman, Jack and Robertson [*FF/A*], 195 Bath Street, Glasgow, C2, have appointed **Mr Thomas Rankin** [*A*] as architect in charge of their branch office at 13 Allan Park, Stirling, where he will be pleased to receive trade literature.

Messrs Jackson and Jackson of Ashford and Folkestone announce that **Mr J. E. Jackson** [*F*] has retired, and that the practice will be continued by the remaining partner, **Mr T. W. Harrisson** [*L*].

Mr Frank E. Moore [*L*] has relinquished his appointment as Chief Architect, John Holt Overseas Ltd., Liverpool, and is commencing practice on his own account. For the present he is carrying on his practice from 92 Church Road, Bebington, Cheshire, where he will be pleased to receive trade literature, samples, etc.

Mr Derek Roberts [*A*] and **Mr Raymond Thomson** have commenced in private practice under the style of **Roberts, Thomson and Partners** at 31 Great Ormond Street, London, WC1 (Chancery 8737), and will be pleased to receive trade literature.

Mr W. A. Ross [*Retd F*] of 5 The Garth, Holden Road, London, N12, is retiring from practice and does not require any further trade literature.

Mr Herbert James Rowse [*F*] has taken into partnership **Mr Thomas Swinburne Harker** [*A*]. The practice will continue at Martins Bank Building, Liverpool 2 (Liverpool Central 2428) under the style of **Herbert J. Rowse and Harker.**

Miss Cynthia Wood [*A*] has left her employment in the Stevenage Development Corporation and is now temporarily practising from her home at 15 Aston Park, Stevenage, Herts.

CHANGES OF ADDRESS

Mr James R. Ashworth [*L*] has retired from practice and his address is now 'Sparthfield House', Clayton-le-Moors, Lancs.

Miss M. M. Baker [*A*] has changed her address to 8 Grand Parade, St Leonards-on-Sea, Sussex, on her marriage to **Mr R. C. Burley.**

Mr P. J. H. Barratt [*A*] has changed his address to 21 Conant Hall, Harvard University, Cambridge, Mass, USA, until 30 June 1961.

Mr Anthony Branson [*A*] has moved his office to 9 Oak Lane, Sevenoaks, Kent (Sevenoaks 53436), where he will be pleased to receive trade catalogues.

Mr. D. B. Carton [*A*] has changed his address to 8 Enderley Court, Thornton-le-Fylde, Lancs. (Cleveleys 4422).

Miss Mary E. Crompton [*A*] has changed her address to 20 Rothesay Court, Harleyford Street, London, SE11, on her marriage to **Mr P. A. Clarke** [*A*].

Mr J. J. Crowe [*F*] has changed his address to 41 Grange Road, Bushey, Herts. (Watford 29087).

Messrs Hodgson, Lunn and Co. (Mr F. J. Hodgson [*L*] and Mr J. W. Hodgson [*A*]) have moved their offices to 170 High Street, Guildford, Surrey.

Mr Michael Meacher [*A*] has moved his office to 1 College Street, St Albans, Herts. (St Albans 56850).

Messrs Moir and Bateman [*F/A*] in association with **Mr K. McCann** [*A*] have moved their head office to Trustee Savings Bank Chambers, Town Hall Square, Rochdale. Their Manchester office remains at 180 Oxford Road, Manchester.

Mr G. B. Oddie [*A*] has left Chiswick and his private address is now New Cottage, The Grove, Epsom, Surrey (Epsom 6209).

Mr A. H. Robertson [*A*] has changed his address to 34 Croome Drive, West Kirby, Wirral, Cheshire (Hoylake 3608).

Mr P. G. C. Rush [*A*] has changed his private address to The Coach House, London Road, Dunton Green, Kent (Dunton Green 400).

Mr James W. Taylor [*A*] has changed his address to Site Architect, Messrs Rowand Anderson, Kininmonth and Paul, R N A S Lossiemouth, Morayshire.

Mr D. I. R. Turner [*A*] has changed his address to c/o Australia and New Zealand Bank Limited, 99–101 Customhouse Quay, Wellington, New Zealand.

Mr John Wells-Thorpe [*A*] has moved to 14 Westdene Drive, Brighton 5, Sussex (Brighton 56572).

Messrs Ronald Ward and Partners [*F/A A*], of 29 Chesham Place, Belgrave Square, London, SW1, opened an office at 4 Friars' Court, Devonshire Street, Carlisle, on 1 January 1961. They would be glad to receive trade catalogues at that address.

PRACTICES AND PARTNERSHIPS WANTED AND AVAILABLE

Fellow with London and overseas practice wishes to contact member with own practice and staff with a view to initial working in association in pleasant offices at Wimbledon and eventual partnership. Box 204, c/o Secretary, RIBA.

Associate Dipl.Arch. (31) seeks position with another architect in the London, Middx, Herts. area with partnership possibilities or working together on mutual basis. Some capital available. Box 212, c/o Secretary, RIBA.

Associate with experience as principal seeks partnership, associate partnership, or suitable practice for purchase. Box 213, c/o Secretary, RIBA.

Associate (36) at present living in British Honduras seeks partnership in an established West Indian practice. 14 years' experience including four years in the tropics. Some capital available. Box 214, c/o Secretary, RIBA.

Small busy Midlands practice for sale. Plenty of work but no staff to spare. Box 215, c/o Secretary, RIBA.

Fellow with London practice wishes to contact members with own practice with a view to initial working in association or amalgamation. Office facilities available. Box 217, c/o Secretary, RIBA.

Architects with busy practice in North Hampshire require an able young architect willing to undertake a probationary period at a good salary with a view to a junior partnership. Box 218, c/o Secretary, RIBA.

MISCELLANEOUS

Wanted. Member is anxious to obtain architectural journals of the period 1880–1920. Box 216, c/o Secretary, RIBA.

Box 156 – The Advertiser thanks all who replied, and wishes to state that his requirements have now been satisfied, and regrets that individual replies could not be forwarded to all correspondents.

The Royal Institute of British Architects, as a body, is not responsible for the statements made or opinions expressed in the JOURNAL.

A B S

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Please address inquiries to:

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Architectural Education in West Germany

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At the present time when fundamental changes are taking place in the various systems available for the education of the architect in this country, it seems appropriate that alternative systems operating elsewhere should be examined in some detail.

During the recent past, few really original ideas have been put forward in the field of architectural education, while the more familiar elements of our courses appear again and again in any proposals for improvement. Five years (no more and no less) seems to be accepted as the inevitable duration of a full-time course in architecture regardless of the abilities of the individual student; 'design' as generally understood in the form of the preparation of schemes for more or less elaborate buildings, is evenly distributed throughout the five years of the course with the problems becoming more complex and the buildings larger as the course proceeds, while a similarly even distribution of lecture material renders it inevitable that only at the very end of his course is the student equipped with the information and techniques essential for the design of a satisfactory building.

At the same time many promising lines of development continue to be neglected. For example, in recent years much time has been spent in discussing whether architects would best be trained in a school or an office, or in a life divided between the two, while little really constructive thought has been given to the possibility and possible advantages of absorbing one or more private practices complete and in full operation into a school of architecture; thereby providing something roughly equivalent to a teaching hospital.

Although it may not be easy or even desirable to try out every alternative method of training which presents itself, it does seem necessary that the present re-thinking of architectural education should concern itself seriously with all the really fundamental issues. Existing methods must be questioned at every point; no system of training must be rejected simply because it is too new, too unfamiliar or too difficult and inconvenient to arrange, and where experiment is impracticable, experience gained elsewhere should, where possible, be referred to.

This account, which sets down some of the information obtained during visits made to seven schools of architecture in West Germany in the spring and summer of 1960, does not claim to be in any way exhaustive. It does, however, give an insight into the activities in schools operating within the Technische Hochschulen, and although the material included is concerned with the organisation of courses and details of teaching methods, rather than with what might be called the higher politics of architectural education, it is thought that the information should be of interest to the profession as a whole, as well as to those who are occupied directly with matters of education. If it occasionally assumes a somewhat didactic slant this may be taken as an expression of personal dissatisfaction on the part of the writer with particular aspects of architectural education in this country.

Before attempting to discuss the various systems of architectural education at present in operation in Germany it is necessary to understand something of the history of the schools themselves and the academic framework within which they operate.

It is worth noting, for instance, that many of these schools have a continuous history from the early years of the 19th century. As early as 1799 a Bau-Akademie was established and operated in collaboration with the Prussian Department of Public Works; providing an initial course of two and a half years for architects with additional courses, following a period of practical experience, in preparation for the examinations leading to promotion within the Department.

At Karlsruhe, a school of architecture was established in the Polytechnic in 1825 with a five-year course which became one of the most important in Europe at that time, while other polytechnic schools were established at slightly later dates at Braunschweig, Stuttgart, Hanover, Dresden, Munich and Darmstadt.

In the late 19th century at least six months' practical experience was required before entry to the courses, this being followed by two years' academic training and then three years of practical experience before proceeding to the higher academic courses. Instruction in design was given by teachers who were also well established in private practice and who had demonstrated their competence as creative architects; while the training generally was considerably influenced by a 'technical rationalism fostered by the scientific discipline inherent in the polytechnic system'.[1]

Today in most schools one may find evidence that these and other traditions have been handed down from the 19th century, but it is perhaps the matter of technical rationalism which is the most typical and most significant, particularly in the schools established in the Technische Hochschulen. Not only is logical thinking very much a part of the normal German attitude to life, but the influence of the Bauhaus should not be under-estimated in any study of German architecture and architectural education. That this influence is so clearly obvious both in the work and thinking in German schools of architecture is not altogether surprising when one remembers that in many cases students may see buildings designed under the direct influence of the Bauhaus in the immediate vicinity of the schools themselves.

We are concerned here only with schools of architecture established in the Technische Hochschulen and awarding the qualification of Diplomingenieur Architekt; no detailed information being at present available about the alternative courses in architecture offered by other institutions in Germany, which include the Hochschulen für bildende Kunst, the Staatliche Bauschulen and the Werkkunstschulen and Werkakademieen.

These schools, which do not all require the 'Abitur' for entry and which may offer courses biased more towards aesthetics than towards technical matters, award the qualifications of Bauingenieur, Diplomarchitekt or, in one case, Architekt HBK. These are recognised as valid qualifications for architectural practice and some individual schools of this class have achieved a high reputation in the field of architectural education. It is, nevertheless, clear that in Germany the qualification of Diplomingenieur Architekt is regarded as being of greater value than any of the alternatives mentioned above.

The Technische Hochschule is not the equivalent of the technical school as we know it in England but is, in fact, a

[1] For much of my information on the historical development of the Schools of Architecture in Germany I am indebted to *Evolution and Achievement*, published by the American Institute of Architects.

technical university, with all the insistence on high academic standards and freedom of thought and action which the term university implies. Historically this concept of academic freedom has always been of the greatest significance in higher education in Germany and, as will be shown later, it is still accepted as a determinant in the organisation and running of courses in architecture. It should, however, be emphasised here that this insistence on personal freedom of choice, which would appear to be considerably reinforced by the present political climate in Germany, applies, at least in some schools, much more obviously to matters of organisation than to matters of architectural philosophy.

There is in Germany no body with a status comparable to that of the RIBA and capable of forming policy on matters of education within the profession. Registration as we know it simply does not exist and the title of architect may be used by almost anyone regardless of his background and training; one notable result of this circumstance being that the client in Germany, who already seems to attach some importance to the services of the architectural profession, has become somewhat discriminating in the matter of academic qualifications and personal reputations when distributing patronage amongst architects. Entry to and promotion within government offices is still controlled by civil service examinations, and from discussions with those involved it would appear that these examinations, which introduce an additional process of selection into a profession already operating on a very competitive basis, are not to be taken lightly.

In Germany the schools of architecture awarding accepted qualifications in a country where rebuilding is proceeding at a great rate, are assured of a lively demand for their products at least for the foreseeable future. They are, moreover, able to organise their affairs in almost complete freedom from external pressures and are, as far as could be ascertained, quite uninfluenced by any consideration of internal politics within the profession; and although there is, in fact, a surprising similarity in the duration, organisation and content of the courses offered in the different schools established in the Technische Hochschulen, it is difficult to see how the results obtained, in terms of education, would be improved by any system of control or recognition of the kind we in this country are familiar with.

I. Numbers and Accommodation

Almost all schools in Germany have a greater number of students than is the case in Britain. Karlsruhe considers itself fortunate in having to deal with only 470 out of a total of 5,000 students in the Technische Hochschule. Hanover has 529 out of a total of 4,039. Stuttgart and Munich have between 600 and 800, while the Technical University at Berlin has between 800 and 1,000 students of architecture alone. Exact figures were not always available owing presumably to the shifting population within the schools and the irregularity of progress by individual students, but it is worth remarking that the tolerance of 200 allowed in the figures provided is more than the student population of almost any school in Britain.

The accommodation available for use by the schools of architecture, although frequently deficient in terms of space, and this applies particularly in the studios, is generally more impressive than any used by comparable institutions in this country. Some schools as, for example, the one at Stuttgart, are fortunate in occupying new buildings, while others such as Braunschweig occupy new accommodation built behind the façades of earlier buildings destroyed during the war.

The rooms occupied by the professors and their immediate staff are particularly well furnished and spacious and although the buildings themselves often form part of a greater and very much occupied academic complex the space available in corridors, courtyards and staircases and the restrained décor convey an impression of dignity and orderliness which is quite outstanding. Obviously the presence of a comparatively large number of influential professors with high academic and professional standing in each school, and in many cases the introduction of the trappings of private practice on a considerable scale, will tend to encourage higher standards at least in staff accommodation. It is, nevertheless, true that the staff of the German schools, both professors and assistants, seem to invest their professional lives with a dignity and a measure of comfort and convenience which for one reason or another appears to elude most of their opposite numbers in Britain.

Staff

The teaching staff of the German schools may be divided mainly into two groups, the first consisting of the professors specialising in design or other subjects who have reached maturity and often considerable distinction in their own fields. They are invited to accept teaching posts because of their reputations as creative designers or specialists in some particular subject and there appears to be no difficulty in attracting the more eminent practitioners into the academic field, partly at least because the invitation itself is regarded as an added distinction.

The professors of design are encouraged to continue to practise after joining the school staff and by one means or another they bring a very strong influence from the real world of architecture into the schools. In some cases this may manifest itself simply in the form of drawings and models of actual projects exhibited and under discussion in the professor's own room, and in others in the form of a flourishing office in the next street or even within the school building with a constant circulation of professor, office staff, junior school staff and senior students between the two establishments.

The degree of balance between private practice and academic work on the part of the professors and assistants is ill-defined, and as one might expect there are complaints about preoccupation with practice and some talk of higher authority occasionally clamping down on the amount of practice to be undertaken by full-time staff. One does not hear, however, of representations being made that this system competes unfairly with the profession outside the schools.

Nevertheless, it should be emphasised that the professors concerned include some of the most distinguished architects in practice in Germany at the present time, most of whom are in a position not only to offer to the students a convincing and often quite personal philosophy of architecture, but also are able to demonstrate in the form of major executed works, just what kind of results its application is likely to produce. Their influence for good within the schools cannot be rated too highly and while one does not wish to labour the point, one seems to have here a system which has, potentially at least, all the advantages of both school and office training.

Not all schools allow students and junior members of staff to work in these offices during term time but many do, and it is obvious that a great deal of information and experience is fed to the schools from this source. Perhaps the most clear-cut example of this system was at Munich where one design professor, his secretaries, draughtsman and the various appendages of an obviously flourishing practice occupied a suite of rooms on one side of a nine-foot corridor while his students occupied slightly more extensive accommodation on the other.

Most professors who specialised in subjects such as construction or history also conducted classes in design, although this was not invariably the case. At some of the schools the senior professor was also the permanent head of the department, while at others such as Stuttgart the professors in turn occupied the position of titular head for a period of four years.

Each professor has allocated to him a number of assistants who form the second group of staff. They are relatively junior both in age and experience and join the staff shortly after qualification, it being customary for the assistants to

teach in the school in which they were trained and for their appointments to be limited to a period of two or, less frequently, four years.

There are also a small number of lecturers who hold more important and more permanent positions in the hierarchy of staff than do the assistants. Some of them hold part-time appointments and they do not occur in all schools.

The number of staff in relation to the number of students varied considerably. At Hanover with 529 students there were, at the time of the visit, three professors of design, each with three assistants; one professor of town planning, with one assistant; and professors of statics, building construction and history, each with two assistants. At Karlsruhe with 470 students there were six professors of design, each with two assistants, while at Munich with 600 to 800 students there were 14 professors of design, each with either two or three assistants. Here, in one case, a Lehrstuhl with 80 students was administered by one professor and four assistants. At Berlin there appeared to be a considerably greater number of students to each member of staff.

In some cases at least lectures were given by additional staff or were taken in other departments in the Hochschule, while only in rare cases were formal lectures given by the assistants. The latter claimed that their time was very much occupied with various duties connected with administration within the department, and although nominally they had up to half of their time free for their own affairs, in practice there was little opportunity for research or similar work.

II. Educational Requirements

For entry to the schools of architecture in the Technische Hochschulen the normal requirement is the 'Abitur', which is the highest examination taken in the two principal types of schools in Germany. These schools, the 'Naturwissenschaftliches Gymnasium' and the 'Humanistisches Gymnasium', include in their courses an almost identical list of subjects, the essential difference between them being that the former lays emphasis on mathematics and the sciences, while the latter stresses languages and philosophy, both in the relative number of lessons given in the different subjects and in the limited range of subjects actually taken in the Abitur examination. It might be noted here that a satisfactory standard must be reached in the complete range of subjects before the Abitur may be taken,[1] and that although the science-biased Abitur is said to provide a better preparation for entry to the schools of architecture in the Technische Hochschulen, those who had entered with the humanities-biased Abitur did not appear to find themselves at a serious disadvantage.

There are no special requirements for subjects such as mathematics or art in the case of students wishing to study architecture, but it is possible for them to broaden their experience in particular fields if they wish; the extra work being purely voluntary and additional to the normal school studies.

The Abitur was thought to be superior in standard to the GCE with subjects taken at advanced level, and evidence from various sources confirms the view that the average German student embarking on his professional training is better equipped than a similar student would be in Britain. What is not clear, however, is whether the superiority lies mainly in the range of knowledge possessed or in intellectual capacity.

Most schools of architecture arrange entrance examinations lasting four or five hours which are mainly concerned with drawing in one form or another, and while more elaborate aptitude tests have been tried at a number of schools they were not thought to be of great value.

[1] The complete range of subjects taken in both types of Gymnasium are: German language, scripture, philosophy, history, politics, geography, aesthetic appreciation, music, English language, Latin, mathematics, physics, chemistry, biology and gymnastics. In addition French language is taken in the Naturwissenschaftliches Gymnasium and Greek in the Humanistisches Gymnasium. In the former the subjects taken in the Abitur examination are: German language, English language, mathematics, physics and chemistry, and in the latter: German language, Latin, English language, mathematics and Greek.

In almost every case the schools required a period of practical training to be completed before entry to the first year of their courses. The duration of this could be six or eight months or even considerably longer, and while some schools divided the time between office training and experience on building sites almost always the greater emphasis was given to the latter.

This insistence on experience as an operative in a building trade appeared to be quite realistic as, for instance, in the case of a girl student who had worked as a carpenter on a building site for a period between leaving the Gymnasium and entering the Technische Hochschule.

III. The Organisation of Courses

The courses in most of the schools visited follow an identical pattern of four years' full-time training divided into the Unterstufe and the Oberstufe, each of a nominal length of two years. Each year is divided into two semesters, one running from November to February and one from April to July. Major examinations are taken at the end of the second and fourth years and students may be required to complete a period of up to one year of practical training between the two halves of the course. The content of the two halves of the course differs very considerably, the two years forming the first half being devoted almost entirely to lecture subjects with a minimum of drawn exercises, while the second half is spent mainly on the major design projects with a considerable reduction in the number of lectures and examinations taken.

Although the minimum length of the course is four years, few, if any, students complete in this time, and while the Unterstufe may not take longer than the two years laid down, the second half of the course usually takes three years and in many cases four or more. At the Technical University in Berlin it was stated that as much as five years might be taken to complete the Unterstufe, while examinations are normally taken after the fifth and after the ninth or tenth semester.

It was admitted during discussion that the extension of courses beyond the period of five years, which is considered normal, was due in a number of cases to lack of application on the part of the student. It was, however, also clear that some students would extend their course either voluntarily or at the suggestion of the School authorities in order to allow themselves time to reach a satisfactory standard; while others would devote time to travel abroad or to limited specialisation on subjects which attracted their attention before proceeding with the course. In the subject of studio design particularly, students would often delay submission until they themselves were fully satisfied with their schemes.

Precise regulations govern the number of times which a student may present himself for examination in each subject, but he may, in most schools, defer his examinations as long as he thinks fit; and as both the major examinations are set at the end of each semester it is possible for a student to extend his course by periods of six months without serious inconvenience to himself or to the school authorities.

By this means the student is allowed to develop at his own rate and adjust the length of his course to suit his own abilities and, at least in theory, this would appear to offer a more realistic and humane system than the one we are familiar with. The student of more than average ability is able to proceed in the shortest possible time allowed by regulations or to elaborate his course by specialisation, while the below average student is freed from undesirably fierce competition and the stigma attached to spending an extra year in the school.

As might be expected the 'year' in a German school tends to be less clearly defined and permanent in its student population than is the case in Britain, and obviously difficulties do arise in the administration of the courses due to this flexibility. In all fairness it should be said that in almost every case the staff of the German schools appeared enormously impressed by the tightly organised studio schedule in current use at the

Manchester University School of Architecture, and although some doubts were expressed about the possibility of operating such a schedule, it was also obvious that only the long-standing tradition of academic freedom and the difficulties involved in altering the present administrative framework prevented a move in this direction.

Mention has been made above of the importance of individual freedom in the German schools, particularly in relation to the length of time taken to complete the courses. One other way in which students may take advantage of this freedom is by moving from one school to another at some stage of the course, the move often taking place because the student wishes to complete some or all of his major designs under the supervision of a particular professor whose work he admires or whose name, attached to a diploma, carries with it a special *cachet*. At Karlsruhe, for instance, where Professor Egon Eirmann has achieved considerable prominence as both an educator and a creative designer, the comparatively large number of applicants wishing to enter the later years of the course with the object of equipping themselves with an 'Eirmann Diploma' is regarded with some disfavour.

Students making changes of this kind will usually lose some time in the process, due to their having to make up the difference between the courses at the various schools, but since the courses are in fact very similar in most respects this does not present a serious problem. Occasionally regulations curtail this kind of movement to some extent, as at Karlsruhe, where at least two major designs must be completed in the school before the final diploma design is attempted. Obvious defects in this system are the lack of continuity in training and the fact that students failing more than the permitted number of times in one school will immediately move to another so that the educational system as a whole becomes burdened with a considerable number of unsatisfactory students.

The rejection of students at any stage seems to be a difficult process except in the most extreme circumstances. No student who has satisfied the minimum requirements may be denied entry to a school provided there is space available, and once he has embarked upon the course it is unlikely that he would be advised to abandon his training however unsuitable he may prove to be. The major examinations at the end of the first and second parts of the course do offer some opportunity for the authorities to reject unsatisfactory students, and it is at these points that most wastage takes place due to repeated failure in examinations. It was, however, obvious that in most schools there was great reluctance to take any definite action to terminate a student's studies once he has commenced, and in this connection discussion of the wastage figures at various levels in schools in Britain caused some adverse comment. It should also be noted that students in Germany who feel that they have been unjustly treated have a right of appeal to the State authorities.

Wastage caused by students abandoning their courses was difficult to assess, but it was thought not to be very high and certainly less than 30 per cent over the whole course.

The suggestion of any variation in the number of years taken by individual students to complete courses will immediately raise questions in the minds of those who are familiar with the administration of scholarships and grants, but current arrangements in Germany for financial assistance to students do make adjustments of this kind practicable.

To begin with, far fewer students are dependent on non-repayable grants which are in any case not so readily available as they are in Britain. Where grants of this kind are awarded five years are allowed for the completion of the course, and beyond this period the student must finance his education from other sources; the most obvious of these being the interest-free government loans for which repayment commences five years after qualification. These loans are available for whole courses as well as for the additional years mentioned above, although there was no evidence that they were used as extensively as local education authority grants are at present in Britain; the greater number of students being privately financed. While no one would suggest that students should be encouraged to saddle themselves with debts of this kind in the early years of their careers, the system does seem to have an inherent elasticity and to place at least some responsibility on the student for the conduct of his affairs.

In the matter of attendance in the design studios and attendance generally there was considerable variation in the practice between the different schools. At the Technical University in Berlin in one Lehrstuhl for design there were only 50 studio places available for 250 students, while in the school at Braunschweig there were 150 places available for 600 students of architecture. Under these conditions any form of compulsory attendance in the studios would hardly be realistic and one hears that students generally prefer to work outside the school. At Hanover, however, they are required to work in the school in spite of a population of 529 in the architecture department alone, and in most schools failure to attend at studio seminars and criticisms will lead to the rejection of the design schemes concerned.

Regulations regarding the passing of examinations vary from school to school; some allowing two failures in any subject (Munich) and some three (Berlin), others requiring all examinations to be passed at one sitting (Braunschweig), while class attendance in lectures, which varied with the subject and the lecturer concerned, could be as little as 25 per cent in unpopular subjects.

While the matters mentioned above are worthy of comment, it is the system under which each student is allowed to select the professor under whom he will work on design projects which is most unfamiliar.

At the beginning of each semester the professors who conduct Lehrstühle for design each issue a number of design programmes of varying complexity which are exhibited on the notice boards in the department; in some cases the three or four assistants allocated to any one professor each taking charge of one of these programmes for purposes of administration and general tuition. The students then consider the programmes offered and sign themselves on to work for a particular professor, selecting at the same time the programme they intend to complete during the coming semester and, incidentally, the assistant with whom they would be in close contact.

At Stuttgart, where this process had in fact taken place immediately prior to the writer's visit, it appeared from the lists that the number of students attaching themselves to the different tutors varied considerably, while in one instance only two or three had decided in favour of a tutor who was not of German nationality and who was, in any case, known to be leaving the school during the following six months. At one school where one professor had achieved outstanding success in practice and had also evolved an extremely virile and personal architecture which he was prepared both to teach and to defend openly in discussion, it was found that out of 24 candidates for the final diploma 17 had chosen to work under this professor while other professors of equal standing in the school had no candidates for the final diploma.

Whether this circumstance caused more embarrassment to those who had no students or to those who had too many was not clear, but it did not appear that any abnormal steps would be taken to adjust the numbers.

This system operated much as stated above in all the schools visited with the exception of the one at Braunschweig, where the students were not allowed a choice of tutors, but in many cases regulations did in fact influence the process of selection in a limited way. Professors who specialised to some extent in subjects such as theory of structures, interior design, housing and town planning would tend to issue design programmes related to their specialisation, and as it is usual to require that major designs should be completed in one or more of these specialised fields in addition to more generalised design problems, students would in fact have to work under

a number of different professors in order to complete normal requirements.

As has already been stated, each professor issues programmes for several buildings of varying sizes and there appeared to be no valid reason why a student should not select all his programmes for relatively small buildings, buildings of a particular type or, for that matter, buildings on open sites. The regulations mentioned above deal with this point to some extent and one gathers that students are dissuaded from occupying themselves with an unbalanced course of this kind. Similarly, although a student might select as his first design programme one dealing with a large or elaborate building group, he is likely to be diverted to something more suitable until he has gained at least some experience, and in any case no serious student would be likely to embark upon a series of major designs which will obviously place him at a serious disadvantage when the work is presented for assessment at the end of the course.

One great advantage of this arrangement is that, coupled with the possibility of moving from one school to another, it allows the student to work with professors and assistants with whose views he is in sympathy, and at the same time ensures that the latter may expect a reasonable degree of enthusiasm and co-operation from the students for whom they are responsible. In addition it is claimed that where, as often happens, several students of different degrees of maturity and competence are working on the same design problem at the same time, the less experienced students benefit greatly.

Not all students do elect to work with the more distinguished professors; those having doubts about the level of their own competence often preferring to attach themselves to less assertive and possibly less exacting mentors; nevertheless, other things being equal, there seems to be much to be said for a process of natural selection which places a premium on the ability of members of staff to inspire student interest, either by the success of their teaching methods or by a demonstration of their competence in practice.

IV. Architectural Design

As explained above, the courses in Germany are divided into two parts: the Unterstufe of nominally two years and the Oberstufe also nominally of two years; both of these parts usually taking longer to complete than the minimum time allowed by regulations. The Unterstufe, which is itself divided into four semesters each of approximately four working months, is occupied almost entirely with lecture courses; the only drawing and design other than that included in the basic design course, and the exercises related directly to lecture courses, being in the form of sketch designs. In the Oberstufe, which also occupies four semesters, the number of lecture courses is less and here the greater part of the time available is devoted to the preparation of the 'Entwürfe' or major designs and the 'Diplomarbeit', which corresponds to the final design thesis.

The type of problem dealt with in these major designs and the number a student is required to complete vary from school to school, but in any case the number of drawings prepared is less than in schools here. As more time is available for the development of the schemes and the discussion of each problem, the standard reached in studio design is consistently high and although only five major schemes may be completed before the Diplomarbeit the standard of competence in this subject of the average student at the end of the course appears to be quite satisfactory.

Before the student faces his first design problem of any complexity at a point somewhere about the middle of the third year of his training he has, therefore, completed and been examined in most of the more important lecture courses and the closely supervised exercises related to them. These exercises involving the development of 'given' plans which form an important part of the Unterstufe are described in detail later.

The most obvious advantage of placing most of the lectures in the first half of the course and virtually all the design problems in the second half, is that the student is better equipped with technical information and more balanced in his outlook on architectural matters when he first tackles design seriously. Right from his first essays in this subject he has almost the whole range of structural possibilities and design techniques at his disposal as well as a broad experience of the history of architecture and allied subjects. It is therefore quite unnecessary for those members of staff teaching design to anticipate material which will be dealt with more fully in later lecture courses and, what is equally important, the students at the end of their third year of training bring to their problems more agile and developed minds than would have been the case two years before.

It was interesting to discuss this arrangement with present students and those who had completed their courses and to find, as one might expect, that while the students who considered themselves to be born creative artists complained bitterly of being frustrated by the lack of elaborate design problems in the early years, the more serious and adult-minded students accepted the system as being both appropriate and satisfying.

At most schools some time in the first two semesters is devoted to basic design courses of the kind which reached a high stage of development in the Bauhaus and the Chicago Institute of Design, and which have since been imitated in most schools in Britain. All the familiar repertoire of patterns, forms and constructs, both drawn and as models in plaster, cut card and balsa-wood appear, and little need be said about these exercises here except that they are arranged in a logical sequence, they are extremely well done, and in some cases they demonstrate considerable originality of thought on the part of both staff and students. It might, however, be noted that in Germany the schools are not ashamed to teach draughtsmanship by means of rigorous and painstaking exercises and, what is more, the student who claims to be a brilliant designer in spite of the fact that he cannot communicate his ideas in the form of drawings or models is unlikely to receive a sympathetic hearing.

One should also mention that the Hochschule für Gestaltung at Ulm, where a 'foundation course' of this kind was in operation until recently, has now abandoned exercises in 'form' as commonly understood, for a system of training in logical design processes, the mathematical solution of problems and other related matters which have been grouped under the term 'methodology'. It appears that this rather unusual approach to design courses is producing very satisfactory results in this school where the prevailing philosophy excludes subjective judgement as a determinant in the design process, and although we are discussing here something quite unlike a normal school of architecture, a first-year course which included disciplines designed specifically to encourage logical, methodical and vigorous thought would have much to recommend it.

The drawn work completed during the first two years, apart from the drawings included in the basic course and a few sketch designs is mostly related to the lecture courses and is completed under a system of very close tuition. It seems to be generally accepted in Germany that the elaboration of working drawings of small buildings is a better way of teaching construction than the preparation of study sheets of constructional elements, and it is also accepted as fundamental that inexperienced students should not be allowed to become confused by being faced with too many problems of construction, planning and aesthetics all at the same time. With this end in view, in the early years of the course programmes are issued in which the main disposition of the plan is clearly laid down in a line drawing but in which wall thicknesses, openings, sections and elevations are not indicated, and from these and from general information provided the student develops sets of drawings which solve the various problems involved.

Dealing with these programmes the student is not distracted by the initial planning problems which so often defeat him in normal programmes, nor is he free to work himself and his scheme into a situation which is structurally or aesthetically untenable. One avoids the unsatisfactory designs resulting from the introduction of structures and materials and, for that matter, forms of design with which the student is not familiar, or from the development of plans which involve structural and aesthetic problems of great difficulty; and one can also control effectively the desperate attempts at originality which are often distressingly characteristic of the work of students in their early years of training. Whoever writes the programme makes certain not only that the problems involved can be solved in terms well within both his own and the students' experience, but also that they relate closely to lecture material and that suitable illustrations are available for purposes of instruction. Particular problems may be introduced into or omitted from the schemes, both in matters of design and of structure, and a clear exposition may be made of fundamental principles by this means. In these programmes there is considerable room for manœuvre both in construction and design generally, as well as opportunities for originality and ingenuity in working out the details of the problem.

Consequently the schemes submitted by the different students are sufficiently varied to avoid any feeling of undue regimentation and, except in the general arrangement of the plan, are no more similar than those obtained from a conventional programme. In practice the development of 'given' plans in this way, far from taking the interest out of design, both stimulates and reassures the student by providing him with an easily comprehensible framework of conditions within which to operate.

The administration of this type of programme is also interesting and although much the same method is followed in most schools, the one in operation at Karlsruhe will serve as an illustration. Here, in the Lehrstuhl for construction, students from the first or second year work in one room in groups of four for periods of two to three days. The groups do this in rotation throughout the year and during this period the four students are under very close supervision from the lecturer in building construction who has his own accommodation in the same room. The drawings prepared are the normal equivalent of $\frac{1}{8}$ in., $\frac{1}{4}$ in. and full-size working drawings, the requirements as to the nature of the drawings and their scale being very clearly stated and suitable examples of solutions to similar problems provided.

The building dealt with in the first semester is a simple one of three cells of different sizes set in line to form an elongated rectangle. In the second semester a more complex building of four cells is developed in brick construction and later in the same semester the basic plan is developed as a timber structure. In the third semester a small house with two floors and a basement is dealt with in a similar manner. All the above schemes are developed from 'given' plans and following these a larger house is designed by the student and in this case no basic plan is provided.

At Hanover four hours per week were devoted to lectures on elementary construction, these being related to six hours per week spent on drawing under seminar conditions, while at Stuttgart at the end of the student's second year simple terrace and detached houses were being dealt with in this manner. At the latter school doubts were expressed about this type of programme in the form at present used, and some changes were contemplated, but at Karlsruhe where no such doubts appeared to exist, the results obtained were thought to be most satisfactory.

The system described above was one of the most promising features of the training courses seen in Germany and it is recommended for serious consideration by those concerned with the teaching of elementary construction.

Programmes for two of these schemes are illustrated on page 115.

During the second half of the course the students are required to complete a number of major designs or 'Entwürfe' before attempting the 'Diplomarbeit' or final design thesis, and as has already been explained students select which programmes they will complete and in so doing also select their tutors for each of these. In each school a varying number of Lehrstühle for design is established, each more or less autonomous and each administered by a professor and a number of assistants. Some of these Lehrstühle dealt with general design while others specialised, either in particular aspects of design such as town planning or interior design, or in lecture courses on such subjects as history or construction. The system is not entirely exclusive and at Karlsruhe, for instance, students do deal with some problems of architectural design while working in the Lehrstuhl for town planning. Similarly the Lehrstuhl for construction will offer design programmes which admittedly tend to involve special problems in constructional design.

At Karlsruhe each student must submit five major designs before attempting his Diplomarbeit, while at Stuttgart, five designs must be completed of which two must be selected from the four categories of town planning, housing, interior design and constructional design. Here working drawings are not prepared in connection with all the designs while there is also an additional requirement of three interior design schemes.

The other schools visited followed similar patterns with minor variations, as at Braunschweig, where the requirement was: two designs completed under the direction of Professor Kraemer, who is the head of the School; two designs under the direction of another Professor, one design from two other groups, two interior design schemes which might be taken from the larger projects, and two town planning schemes. At Hanover again five major designs were required, of which one was concerned with town planning and two were completed with constructional details. Here a design test lasting ten hours and three one-week designs and one small sketch design each week were also included in the requirement. Additional study sheets might also be completed in connection with the advanced lecture courses.

The problems were similar in size and complexity to those completed in the third, fourth and fifth years of schools in Britain. The time taken to complete the schemes varied very considerably from one student to another, but in most cases appeared to be much longer than that allowed for similar schemes here. It should, however, be noted that most students had several schemes in progress at the same time, and in any case the total output of actual drawings before the final Diplomarbeit is less than we would expect.

The administration of the Diplomarbeit again varied considerably. The time spent on this scheme was usually eight to ten weeks and in almost all cases no tuition or criticism was given during this period. Students expressed strong convictions that in this scheme personal integrity was involved and that, as they were demonstrating their own competence, outside help was not acceptable. At some schools the students were required to speak in defence of their Diplomarbeit before an assembly of staff and students. At Hanover the same programme was issued to all the final students, while at Munich and Berlin individual problems set by the professors concerned were issued to students who at the latter school discussed their programme with their professor before the subject and content were decided upon.

It appeared that in most schools a proportion of the students worked regularly on the school premises but that, owing mainly to the large numbers involved and the acute shortage of space, most of the supervision of studio work was carried out on a tutorial basis. The students appeared in the studios at set times and the tutorials took place with groups of widely varying numbers discussing their schemes in turn with their tutors. The number might be as few as three or as many as 15 or more. In addition to receiving tuition from the assistants students would also discuss their

Patio Terrace-House

The following drawings are to be prepared for the plan given of a patio house (clear room-height 2·50 m.):

	Scale
Site Plan	1 : 200
Plans, Sections and Elevations	1 : 100
Constructional Section	1 : 20
All Working Drawings	1 : 50
Details	1 : 10 & 1 : 1
Interior Sketches	
Optional Model	

All drawings are to be delivered in A2 size folders.

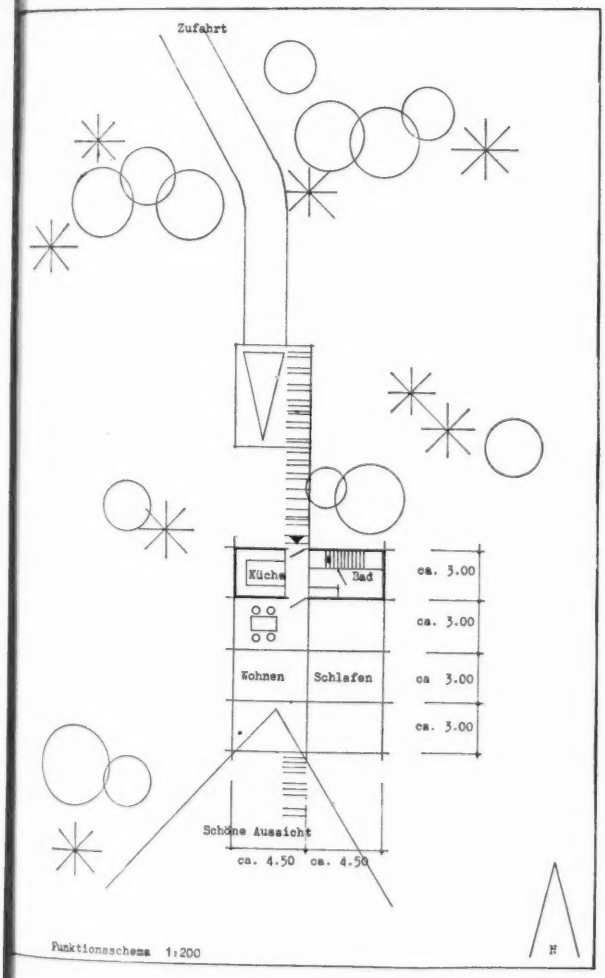
Single-storey Vacation House

A vacation house is to be designed according to the schematic plan given, on a site and in a climate chosen by the student himself. The schedule of accommodation can be varied for an occupancy of from 3–6 persons.

Required:

	Scale
Site Plan	1 : 200
Plans, Sections and Elevations	1 : 100
Constructional Section	1 : 20
All Working Drawings	1 : 50
Details	1 : 10 & 1 : 1
Interior sketches or Model	

All drawings are to be delivered in A2 size folders.



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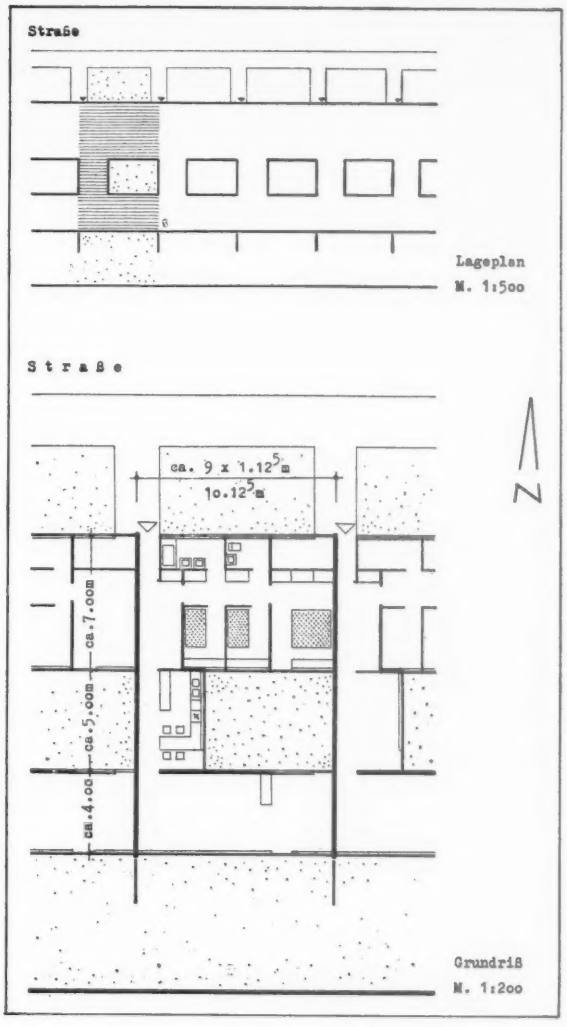

work with the professor to whose Lehrstuhl they were attached at less frequent intervals.

For instance, at Munich where the programme of supervision was very carefully worked out, in a Lehrstuhl in which 80 students were being supervised by one professor and four assistants, the students attended for design seminars at least three times in each week and each individual student would receive a personal criticism of his work from the professor three or four times in each semester. At Braunschweig the student would see his professor at least twice with each scheme, and in addition would attend for discussions with an assistant at least once a week and more frequently as the scheme neared completion. At Stuttgart criticism was given according to a set timetable and the staff were generally available at other times. For the more complex schemes a more elaborate formal criticism might be given by the professor of design lasting as much as ten hours, with the students at liberty to enter or leave as they wished.

There appeared to be no actual registration of attendance but, as previously stated, failure to present schemes for criticism at reasonable intervals during development would lead to the rejection of the scheme at the final presentation. Although the system appeared to work reasonably well, it was agreed that contact with the individual students was not adequate and members of staff who had some experience of schools in Britain felt that here the lecturers' understanding of both the student's development in relation to his studies and his personal problems relating to his life generally was

very much better. This is, perhaps, not altogether surprising when one considers the relative numbers involved in schools in the two countries.

Presentation

In Germany models of sites, buildings and parts of buildings are used extensively both at the design stage and as a form of final presentation. This applies in the schools and in the offices, and in both places the standard of model-making is consistently high. In one office visited, with a total staff of about 14 architects, two assistants are employed exclusively in producing models. These are not all of complete buildings, but in some cases sectioned parts of buildings are studied in this way and even quite small elements are reproduced to quarter full size or similar scale. In yet another office, studies of the elevation of a proposed office block had been made in the form of a series of alternative solutions to $\frac{1}{2}$in. scale or thereabouts built up on sheets of plate glass. The projections, recessions, forms and materials were all very accurately reproduced and one was left in little doubt about the appearance of the finished building.

In the schools from the beginning the students use models as design tools during the development of their schemes. At the design seminars they appear with quite small-scale sketch models which illustrate the intended spatial and structural organisation and these, together with sketch plans and sections, provide very satisfactory material for discussion. It was obvious that this process helped the student to conceive his designs in terms of three-dimensional forms and spaces related to three-dimensional settings, and discouraged paper planning in two dimensions and purely elevational composition. Moreover, working in this manner at a small scale the student was not distracted by detail matters of design, but concerned himself, at least in the early stages, only with the broader issues. The simplicity and clarity of planning and composition in most of the schemes seen was evidence of the inherent advantages of this system.

In this connection one might add that one assistant who had considerable experience of American schools of architecture and was then teaching in Germany, claimed that in his opinion the final drawings rarely conveyed a really adequate impression of the building which they illustrated. He admitted that the scale of the drawings tended to become larger as the scheme progressed but, to use his own phrase, 'one can never really get down into the building when studying the drawings'. This would not be an unreasonable comment on a fair number of the drawings seen, but at the same time we should remember that the internal organisation of at least some schemes is explored very fully by means of interior models, again to a fairly small scale, carried out as part of the work in interior design.

Generally speaking the drawings themselves tend to be diagrammatic and broad in treatment, and there was little attempt to introduce realism in the form of trees, figures, etc., into the presentation; most of the drawings being presented in pencil or ink with very little colour of any kind. One might say that presentation for its own sake was not even of secondary importance, but that clarity and simplicity were considered essential.

As the drawings examined and discussed with students and staff were mainly the work in hand, and as no complete sets of school drawings were seen, it was hardly possible to come to any firm conclusion about present trends in design. From what was seen, however, it was clear that in almost all schools the kind of architecture which recurred most consistently was that which has come to be associated with the names of Gropius and Mies van der Rohe, although in most schools there is complete freedom of choice in this matter.

An architecture based upon logic and simplicity seems to have a particular appeal to the German mind and this is evident both in the work in the schools and in new buildings in Germany, while the polygonal planning and ambiguous block forms which have attracted attention in Italy and become so popular in school work in Britain only appear occasionally. There is, moreover, little evidence of the pursuit of fashionable clichés which has become almost an occupational disease here in recent years.

There were exceptions where students were clearly under some pressure in the matter of their approach to design and architectural philosophy generally, and at one school where design and thinking about design were clearly dominated by the beliefs of the senior professor, this matter of freedom of choice was discussed in some detail with a small group of staff. Finally, they were asked what would happen to a student who insisted on producing designs in the manner of Frank Lloyd Wright, and after some minutes of rather embarrassed discussion it was agreed that this could not happen, the inference being that by one means or another the student would be prevented from continuing along this line of development in this particular school. This kind of attitude was by no means universal and only at two of the schools visited did it appear significant. The context was also important as, for reasons already explained, a student in Germany is to some extent able to make his own choice of the intellectual climate within which he is trained, although he may move to another school to find it.

It is not, of course, fashionable in Britain today to teach a particular architecture or even to encourage the serious study of the working methods used by the more original and successful architects, mainly, it is understood, because of a belief that each and every student has, latent within his imagination, a personal architecture and a quite original design procedure which must be unearthed and exploited from the very beginning of his training. How much this attitude is due to the lack of personal conviction and experience amongst those engaged in teaching is not clear, but there seems little doubt that example, discipline and clear guidance, and of these most particularly example, at least in the early years of a student's training, will develop a greater understanding of creative design more quickly than any amount of ill-regulated self-expression.

The more clear-thinking and ambitious students now reach this conclusion themselves and, often accepting lower salaries than they could gain elsewhere, go to work for those practitioners who appear to have something worth while to offer, in the way of a developed and manifestly successful philosophy of design.

For obvious reasons this expedient has severe limitations in the numbers involved and the opportunities for organised instruction, and one cannot help feeling that more positive methods of teaching design and a means of bringing the more able practising architects into the school system on a permanent basis, as happens in Germany, should be looked for.

Practical Experience and Post-Graduate Work

As has already been explained, most schools require a period of practical experience to be completed before the student commences his course, and in some cases a period of office training was introduced between the two halves of the course. At Stuttgart this office training had previously been arranged by the student, but in future it was intended that the school authorities should direct the students to particular offices, thus ensuring the usefulness of this period. In addition to the above, students might decide to spend one or more semesters in gaining office experience during the course and this arrangement, which was only made possible by the flexibility of the system of administration, was of considerable help in allowing students to retake failed examinations before proceeding with their studies. After the completion of the course and the award of the diploma the student was free to enter private practice on his own account, but this was not normal procedure; most students preferring to gain further experience by working in already established offices.

Generally post-graduate work was carried out only on a

limited scale. The taking of higher degrees as a means of obtaining paper qualifications was in any case severely discouraged and although there were some cases of research projects into such subjects as city planning and structural techniques being carried out, these were exceptional. Most doctorates were awarded for historical theses and there was more evidence of work of this kind proceeding on an extensive scale at Karlsruhe where the Institute of Archaeology has achieved considerable prominence in German academic circles. From here work on sites in Greece and the Middle East had been organised in addition to studies related to subjects of historical interest in Germany.

Lecture Courses

There is not space here to examine the lecture courses in any detail and in any case the limited time available during the visits precluded any elaborate study of this aspect of training. There were, however, a number of points which came up during discussion and these may be found interesting for purposes of comparison and as a basis for a more detailed examination of German educational systems.

History was regarded almost entirely as an academic discipline and not all schools continued the course up to modern times. At Berlin it extended through six semesters (nominally three years) and included essays and study sheets and measured work; while at Munich, where there was some intention of increasing the content of the history courses, an essay on an historical subject was completed at the end of the second year. The general feeling was that both the history and theory courses were not satisfactory in their present form and would benefit from considerable revision. Theory as a separate subject hardly exists in Germany, relevant material being included in other courses dealing with structures, history and building design, but when those concerned were asked at what point in the course one might deal with the various matters relating to the philosophy of design it was admitted that something equivalent to a theory course was desirable. It was, however, emphasised that in their opinion this material would only be presented effectively by a professor of philosophy and theory teaching something amounting to the history of culture and art, and it was thought essential that the professor concerned should be an experienced architect. One gathered that a candidate suitably equipped for this appointment would be no more easy to find in Germany than would be the case in Britain.

The teaching of building construction in the lower years of the course has already been dealt with, but it is interesting to notice that advanced building construction as distinct from structural design is not included as a lecture course. This may be slightly misleading in that some of the material would be included in the earlier lectures in this subject, but inquiries in Germany suggested that students were expected to find their own information about the more sophisticated ways of putting buildings together. This seemed to be a matter of deliberate policy on the grounds that students should not be spoon-fed with information once they reach the later stages of their training. One other point worth mentioning is that structural design is considered in lecture courses mainly as a matter of statics and hardly at all as a matter of structural form.

Finally, what may be said about the German students who provide the *raison d'être* for all this complex educational system?

There is a marked difference between the students in the south of Germany and those in the north, which shows itself in the comparatively high degree of self-discipline at such schools as Stuttgart and Karlsruhe and the more extrovert attitudes in dress and behaviour which are evident in the north, and which are very similar to those which one might expect to find in any school in Britain.

It was agreed by most members of staff that the students did work extremely hard and for long hours. They are in any case slightly older when they enter the schools than students normally are here, and, if those who have experience of both are to be believed, they are already better educated when they arrive. In the schools one gains the impression that they are more mature as personalities and although one suspects that they are not quite so tough-minded as some writers have suggested, they do appear to have an unusually high degree of self-assurance and singleness of purpose.

One hears these two characteristics commented upon whenever current attitudes in Western Germany are discussed, and it would be surprising if they were not in evidence amongst staff and students in the schools of architecture. Here in Britain few people involved for whatever reason in architectural education at the present time would seriously lay claim to either, and, bearing this in mind as well as the careers and influence in things architectural of the more prominent German architects and educators in the recent past, it would appear that much might be gained by paying serious attention to their methods.

Fifth Joint Symposium at Preston

An Aesthetic Refresher, the title given to the 1960 symposium held by the Preston, Blackburn and District Society of Architects in co-operation with The Building Centre, at Alston Hall, Lancashire, from 2 to 4 December 1960, was clearly more attractive to architects than builders or quantity surveyors and fewer builders attended than in previous years.

In the opening lecture, Mr Francis M. Jones [*A*] (Liverpool University) gave an historical survey of architect/builder/engineer relationship during the last 100 years. He suggested that demand for mass-produced building during the Napoleonic Wars and later from industrial needs excluded architects from control of building capital and may have been responsible for their adoption of a stylistic approach in mid 19th century.

Professor J. H. Napper [*F*] (Kings College, Newcastle) in a paper entitled 'Architectural Design Now and in the Future' suggested that a free mind must result from experience of buildings, not from second-hand knowledge gained from photographs. Release of ideas should come with changes in living, and style in the past had suffered from looking backwards – never forwards. Style – which he defined as 'the arrangement of form in a way that can be recognised' – was still little understood and no picture could yet be seen of an emerging style in the new machine age.

Technological advances may form a basis, but before the new style could emerge there must be a basic discipline and understanding of building uses, urban living and factory-home environment. Towns are People!

Mr Eric de Maré [*A*] – speaking on 'Life, Architecture and Money' – called for a new set of values. He attributed our present guilt complex environment to a Puritan urge to make money. The credit system with its false shortage of purchasing power was 'the jargonised bedlam of financial wizards'. Only a society in which artist/architect was paramount and money subservient would resolve the present chaos.

Other speakers included Mr D. R. Leaker [*A*] (Cumbernauld Development Corporation) giving a complete picture of the aims and results of the new town project at Cumbernauld, housing 70,000 people. Mr William Mitchell, artist, spoke of his work as Consultant to the London County Council and showed the excellent results obtained by using unusual raw material as the basis for his murals.

The symposium closed with a paper by Mr Eric Atkinson (Leeds College of Art) in which he stressed the value of integrated training courses and the need to retain the discoveries of the last 100 years in an understanding of the future. F. L.

The Education of an Architect

By R. Llewelyn Davies, MA (Cantab.) [*F*]
Professor of Architecture in the University of London
Inaugural Lecture delivered on 10 November 1960 in the Anatomy Theatre

This month, 300 years ago, the Royal Society was founded. One of its founder members was Christopher Wren, a mathematician, astronomer and architect. Wren saw no conflict between his work as an artist and as a scientist; it would not have occurred to him to draw a line between art and science. But this distinction, which became firmly established in the 19th century, is now entrenched in our thinking. It has split our concept of the architect down the middle. Our present pattern of architectural education derives from a time when the division between art and science was widest. Although this division has been challenged in recent times, particularly by Walter Gropius, and is now rarely defended, the form and content of our education has so far undergone little change. We therefore have to review the whole pattern of architectural education, to consider the range of knowledge which an architect needs, and the methods by which he can be trained to use his knowledge as a creative designer.

The need for good architects has never been greater than it is today. If we review the achievements of civilisation in recent years we can justly claim stupendous advances in our power to control our environment. Daring and triumphant advances are being made every day by science and technology, but so far we have utterly failed to use these achievements to create an acceptable man-made environment in our cities and buildings. Architects are concerned with this environment, from the city plan down to the doorknob, and architecture profoundly affects all our lives.

Vitruvius, writing in the time of Augustus, said that an architect should 'have a knowledge of letters, be expert in drawing, learned in geometry, not ignorant in optics, instructed in arithmetic, well-read in history, to have diligently attended to philosophy, to have a knowledge of music, not a stranger to physic, understanding in the Law, and conversant in astronomy and the aspects of the heavens'. He argues the case for each branch of knowledge in detail, explaining the need to study medicine in order that buildings and towns fulfil the needs of public health, and for a knowledge of arithmetic 'in order that the expense of the edifice may be calculated and the difficult question of symmetry solved'. However, he goes on to say that an architect need not achieve full mastery of these subjects so long as he reaches a general competence in them. Some few men, says Vitruvius, will achieve complete mastery of all these subjects, such men will 'surpass the achievements of architects and become mathematicians'.[1]

The architects of the Renaissance quoted Vitruvius with approval in their writings, and often fulfilled in their own persons his stringent specifications for an architect. Up to the time of Wren, it was accepted that an architect's education should cover the whole range of human knowledge, and it was possible for it to do so. To an architect of the Renaissance the body of knowledge which he used appeared as an homogeneous whole, and he would not understand any attempt to divide it as between art and science. No theories or rules of architectural composition will be found in Renaissance treatises; they did not try to separate out the act of design, or to legislate for it as an activity on its own.

A different and historically disastrous picture of the architect's training and of the role of the architect was established during the 19th century. At this time social change and technical advance had greatly widened the range of knowledge required by an architect and made necessary many new kinds of buildings of a complex and unprecedented kind. The architects of the period reacted to this challenge by abandoning altogether the Renaissance concept of the architect as a universal man, by excluding important branches of knowledge and by establishing the idea that architecture was an art with its own fundamental discipline quite separate from any other art, science or craft. They withdrew both from the study of what was needed in buildings, and from the study of building construction.

They evaded the problems of building need by inventing the concept of the architect's 'programme', a written schedule of instructions defining the requirements of the building in detail, even down to the sizes of rooms. It was the task of the building owner or client to work out this programme and present it to the architect. This has proved a disastrous innovation, and has had ill-effects from which we are only just beginning to emerge. (The architect of the Renaissance did not need a programme. If he was asked to design a church or a villa, the breadth of his education ensured that he would share with his client an understanding of what would be needed.)

It was more difficult to evade the problem of building construction and technology. They met this challenge by a determined attempt to limit the forms used in building to a selected range. This range, based as far as possible on classical models, consisted of a number of 'elements': the arch, the door, the window, etc. Once this range had been established the constructional details of each could be learnt by rote by the student. Further, the engineer's part was reduced to that of making these elements stand up safely in a building. His role became secondary, and the need for the architect to understand structural principles as a basis for design was made to appear unnecessary.

Architecture could now be defined as an art of assembly, and this was how it was taught at the Ecole des Beaux Arts. Treatises on the 'theory of architecture' appear at this period. They deal with principles of assembly; they are concerned with symmetry and balance and postulate various rules: for example, that duality is to be avoided. This meant that two similar objects, such as the two arches of King's Cross Station, should not be put together unless they were dominated by a third, more important, object which was then said to 'resolve the duality'.

The system of teaching was exactly fitted to the principles I have just described. The students had to learn the basic catalogue of building elements in close detail. For the studio exercises, the students had to prepare a preliminary 'esquisse' or sketch. Each student was confined in a separate cubicle for a whole day; he was handed a detailed programme, prepared by the teacher. During the day he composed the design using an appropriate selection of elements, and in the evening presented his sketch. This whole procedure exactly symbolises the Beaux Arts conception of the architect's role in society: he is cut off from life by his professional expertise – the cubicle. He receives his programme from outside in a rigid and detailed form; he then, by an act of individual inspiration, assembles a number of ingredients into a design.

Even at the height of its influence the Beaux Arts system was attacked as narrow, particularly by the architect and teacher, Viollet-le-Duc. He blamed it for the production of architects who 'involve private individuals and public bodies, who entrust works to them, in enormous expense; who are disinclined to study the material requirements of the programme or its practical execution; whose aim is rather to erect buildings that will do honour to themselves than to fulfil all the conditions imposed by the needs and habits of the day'. He goes on, 'to make architecture a mystery, an art shut up within certain conventional methods, which the profane can neither see nor comprehend, may be (it is true) the means of preserving a kind of monopoly to those who enjoy it; but is it not to be feared the initiated will be left alone with their mysteries?'.[1]

Sixty years later Walter Gropius, at the Bauhaus in Dessau developed the only really comprehensive and consistent set of principles for architectural education between the Beaux Arts and the present day. In a comparatively short time between its establishment in 1919 and its dissolution under political pressures in 1933, the Bauhaus made a contribution of historic importance. The essential idea behind the Bauhaus was in diametric opposition to that of the Beaux Arts; it was opposed to 19th-century dualism, separating the individual from the community, and held that art was essentially one with other branches of activity. Its aim was to establish for artists and architects the link with the realities of matter, technique and economy. The student was first subjected to a preparatory course lasting six months, aimed

[1] *The Architecture of Vitruvius*, London, 1791.

[1] Viollet-le-Duc, *Lectures on Architecture*, London, 1877.

at freeing him from all preconceived ideas about form, and helping him to use first-hand experience. After this he pursued parallel courses in the school workshops, and in design. The purpose of the workshop course was not so much to teach practical skills for their own sake as to ensure that the student escaped from the isolation of design on paper, and achieved a direct feeling for form and material. Design was not seen at the Bauhaus as a subject on its own; instead the student was taught the psychology of vision and the physics of light. In its short life the Bauhaus made an immense impact. Many of the most famous architects and designers of today were students there; the painters Kandinsky and Klee worked there, and tubular steel furniture was invented in the Bauhaus workshops. The Bauhaus is always referred to with respect, but its theoretical basis is often misunderstood, and the lessons of its achievements have never been fully exploited.

Consider an architect's education at the present time. It is illuminating to contrast the pattern in architecture with other fields where academic education is linked to professional training, such as medicine and engineering. In engineering it is common practice to devote the three years of the university course almost entirely to fundamental theory and leave the more practical aspects of the subject to be learnt after leaving the university, or by postgraduate courses. In medicine the transition is less abrupt, but there is a similar progression, starting from the teaching of pure science and ending with clinical experience in a teaching hospital. There are good reasons for this progression; it follows the logic of the subject; and students find it easier to learn the necessary theoretical subjects at the beginning of the course, as these connect directly with what they have been taught at school. But there is one danger. The student may pass through the whole of the early, and most formative part of his education without ever being presented with the totality of his subject, as he will meet it in practice. When he comes to diagnose a patient, build a bridge or design an aeroplane, he must act intuitively, for his decisions will involve weighing a number of incommensurable factors. If his early teaching is completely fragmented into the basic sciences which underlie his subject he will not be trained in the art of balancing the several different aspects of his problems, nor will his powers of intuition be developed. Finally, in every university subject, except architecture, postgraduate studies and research are vigorously pursued. It is through these studies that the subject is advanced, new knowledge developed, and future teachers trained. In the professional subjects postgraduate work is also an introduction to high-level practice, and trains the student in collaboration with men from related disciplines, working as a member of a team.

Architectural education presents a striking contrast. Postgraduate teaching and research hardly exist. The main strength lies in the training it gives in the intuitive and creative process; i.e. design work in the studio. Lectures, with their attendant examinations, are regarded as necessary but rather irritating interruptions. The principal lecture courses are given in three main subjects: history of architecture, structural engineering, and building construction. There is little attempt to separate theory from application, or to ensure that theory is taught first. The general pattern I have described applies, with minor modifications, to nearly all schools of architecture in this country – despite a wide variation in character from school to school.

Some schools of architecture are thought of as traditional, and some as revolutionary, but the difference seems to rest in the flavour imparted to the instruction by the teachers, and not to any real differences in the form or content of the courses.

Do our present courses provide a fit education for an architect? The answer can only be no. The range and character of the knowledge presented to students is obviously inadequate, and our methods of teaching are sufficiently eccentric to warrant serious discussion. The results may not be as bad as we might expect, but this is due mainly to the intrinsic fascination of the subject and the enthusiasm of the students, who indeed often emerge as architects and sometimes as educated men, despite the inadequacies of our system. They may even approximate in character to T. L. Donaldson – the first professor of architecture in this College, who was described by one of his students as: 'Full of learning, ready of speech . . . but deficient in precision, though the fulness and variety of his knowledge went far to atone for some want of exactness'.

What should an architect's education be at the present time? It is certain that we must come out of the narrow private world of 19th-century architecture, divorced from science and practical life. But can we, in the conditions of today, hope to re-establish the architect as an all-round man – the *homo universale* of the Renaissance? We can, but only if we make a distinction between practice and theory. This was clear enough to Vitruvius: '. . . every art consists of two parts, the practice, and the theory; of these, one is peculiar to those who exercise each particular art, viz. the practice; the other, which is the theory, is common to all the learned'. With this distinction in mind we can review the field of knowledge which has to be covered in an architect's education, noting that while he needs to understand the fundamental theory of a very wide range of subjects, he does not have to go far down the path of practical application in all of them. Let us begin with subjects which are wholly neglected at present – the group of sciences which deal with the human being – both as an individual and as a member of a group.[1]

The environment created by an architect impinges on the individual human being through his eyes and his ears, it affects his comfort through his skin and his breathing. To understand what he is doing when he designs a building, an architect must know how it will affect people. Therefore he must be taught something of anatomy, physiology and the psychology of the special senses. He must also understand enough physics to predict the physical conditions which will be produced within his buildings by his design. In our present courses some consideration is given to these questions, but they are dealt with in the wrong way and at the wrong time. Instead of presenting the physics, psychology and physiology of the human environment at the very beginning of the course as part of the theoretical basis of architecture, we usually give the student a short account of the practical problems of heating, lighting and acoustics towards the end of his training. He naturally forms the conclusion that these environmental factors are something additional to the architectural design – something to be solved by calling in a technical expert. This is a striking example of the consequences of the false opposition of art and science.

The social sciences are equally important, as they provide the means whereby we can fit buildings to the needs of human beings as a group. Modern society is too complex for the architect to have an automatic understanding of what is wanted in a building; the client does not know this either, although he sometimes thinks he does. For many modern buildings, there is no single client. Many people are concerned with the functioning of a hospital or a college, each may understand the workings of some part of it, but no one understands it completely, as a whole. Again, the long life of buildings when compared with the rate of change of human organisation, means that people often adjust their pattern of life or work to fit an old building. If they are asked to specify their needs for a new one they think in terms of an old and familiar environment, they cannot break out to see what they really want. Therefore the client's brief is nearly always wrong, and a bad brief inevitably results in disastrous architecture. The solution lies in the joint study of building function by architect and client. The techniques for study are those of the social sciences, and the architect's education must equip him to understand and use these methods.

The idea that these sciences are related to architecture is fairly new and we have still to work out how best to teach them. In doing so we shall be greatly helped by the development of research. There are already several examples which point the way. One is the study of natural lighting in buildings, which involves architecture, physics and psychology. Research in this field has already given us new ways of thinking about light, shape and colour, and stimulated the appearance of completely new forms in architecture. There is also important work on the functional requirements of certain types of buildings – schools, hospitals and laboratories – by research groups which include people from many disciplines working as a team. We must encourage the growth of these studies within university departments of architecture. They provide the essential link between teaching, theory and advanced practice, without which professional education stagnates.[1]

These are new subjects, but we have also to consider the traditional ones. Of these, history of architecture is an ancient and respected example. But it can be challenged. Is it really necessary to the education of an architect to learn about the past? If we think simply in terms of the ancient buildings themselves, I think we must admit that there is a real difficulty in drawing lessons from them for the present. Their beauty

[1] Richard Llewelyn Davies, 'Human Sciences', *The Architectural Review*, March 1960.

[1] Richard Llewelyn Davies, 'Deeper Knowledge: better Design', *Architectural Record*, April 1957.

may move us deeply, we may get keen pleasure from them – but do they connect closely enough to give us real help when we sit down to design a building ourselves? So long as historical teaching remains concentrated on the outward form of ancient buildings, presenting them in a systematised catalogue, covering all periods and all countries – a sort of architectural fauna and flora – it is hard to answer this question affirmatively. But if instead we consider the recent work of art historians, particularly those working in the Courtauld and Warburg Institutes at this University, we can make much more positive use of history. Take, for example, the study of Renaissance architects by Wittkower, formerly During-Lawrence professor in this College. He is able to show how Alberti and Palladio themselves saw their problems, what they aimed to achieve, and how they set about it. His book[1] is a revelation, it brings out the methods and principles which underlie Renaissance architecture. These methods and principles – the use of mathematical proportions, the symbolic purpose of architectural forms – are very close indeed to the problems of our times, or indeed of any time. We now realise that if we take history in this way, concentrating if need be on certain periods, we can make it a very vital part of an architect's education. Once again, art and science interlock, and some of the methods of scientific inquiry which I have mentioned earlier are now giving us fresh insight into the achievements of the past. Studies in light and vision have given us a clue as to why a Georgian sash window is so pleasing to the eye, and why late Gothic church interiors have such a magical, disembodied quality.

Another traditional subject, theory of structure is absolutely fundamental to architecture. An architect without a strong intuitive sense of the play of forces in a structure has one hand tied behind his back. It is of the utmost importance to get this part of his education right, but there are very great difficulties in doing so. Very few architects have managed to acquire this sense, and few engineers have it either. At the conclusion of his course, an architect can carry out some of the calculations necessary to analyse what is likely to happen to a given structure subjected to a given force. But ask him to imagine a structure appropriate to a particular set of circumstances, or to guess imaginatively at the pattern of stress in a given structure without performing his calculations, and, most often, he will not be able to do it. How are we to teach this? First we must face the hard fact that the concepts of theory of structure are mathematical. There is no easy way of imparting a sense of structure – it can only be done through mathematical understanding. We will therefore need to give more attention in our teaching to the fundamental, mathematical side of engineering design, and to bring the student, through a mastery of theory, to an intuitive grasp of structure. At the same time I hope we can drop some of the teaching in applied structures. No architect today designs his own steel frame, and no point is served in trying to train him to do so.

Finally we come to the traditional group of subjects dealing with building construction and building materials. Teaching in these subjects has become a desperate and hopeless race to keep up with the increasing range of materials available in building and the increasingly complicated techniques for assembling them. Fifty years ago an architect could be taught pretty well all there was to know in this field, but even then it was formidable. Then, it was part of his job to design a window, drawing out on paper the precise shape of the joint between the top and side members, specifying how they should be wedged and glued together, and selecting the timber to be used. This never happens today. An aluminium window is not designed by an individual architect but by a factory design team. Only a metallurgist could judge whether the aluminium of which it is made is suitable for its purpose. Even if the architect uses a timber window, it will be jointed with a synthetic resin adhesive which only a highly specialised organic chemist could specify.

Once again, the lesson is that we must go back to the basis of the subject. We must give up the attempt to pursue in an academic course the application of technology in every field of building. These applications will be better learnt by the young architect during his early years of practice, after leaving the school. Our task is to educate a man who can master these problems when he meets them. He needs to be sufficiently literate in physics and chemistry to relate materials and methods of construction to the needs of any particular job. He needs to be able to read and understand discussions of a scientific character and to know how to work with and learn from experts. We should have something to learn from the training of doctors in this matter. The medical profession has also had to face the transition from the days when the doctor mixed his own potions to the circumstances of today, when he has to prescribe medicine made by processes outside his experience and whose chemical structure he could not describe.

I have devoted a good deal of time to discussing the theoretical and didactic part of our education. I have done so because this is at present so weak, and not because I consider the other side, training in design, to be any less important. Design work in the studio is our strong point. Indeed there is much that might be learnt from this part of our work by other university departments. In the studio the student is continuously reminded of the one-ness of architectural design, and that the barriers between art and science, can be effectively broken down. Every problem set to the student can, and should be made to require some synthesis of the different facets of architecture. There are, however, two changes which we must introduce.

First, we must cease to regard drawing as the sole means of communication which architects can use. We must include exercises in which the results are presented in writing and in speech. We must educate architects to use all available methods in communication, and to understand something of the theory of this subject. Undue emphasis on drawing has tended to make architecture a closed shop, and to perpetuate the feeling amongst architects that they are a private group who cannot discuss the mysteries of their work with outsiders.

Second, and this is more important, we must recognise that training in design is not a form of teaching, but something quite different. Teaching involves facts and knowledge which are imparted to the students by a teacher. There are no facts about design, and we should not try to give lectures about it or write books about it. Books have indeed been written, and lectures given on this topic, but they are always disappointing to the student. Somehow they don't seem to tell you just how to design a beautiful building; it's rather like the disappointment you feel on reading books about the art of love. Instead of trying to teach design we must go back to the lessons of the Bauhaus, and consider how best we can free students from the things that stop them being able to design. We have to clear away preconceptions, clichés, a whole mass of accretions, which prevent them seeing their problems freshly.

It is difficult to explain just what the essential character of architectural design is. I think it is rather like Nansen's voyage across the Polar ice cap. Nansen had a theory about polar drift. He believed that the ice moved in a particular way, across the North Pole, from East to West. He assembled all available knowledge on this subject and all the scientific data, but his thesis still remained incomplete, unproved. So he turned from thought to action – he designed and built a ship, embarked on it, and deliberately allowed it to become locked in the ice, to drift to his triumphant vindication – or to shipwreck.

The education of an architect should fit him to undertake his polar voyage. He must be capable of the devoted preliminary study, the analysis of every measurable factor, culminating in the imaginative total grasp of his problem. He must then have the courage and toughness to lock himself in the ice, to let the free working of his creative mind take him towards his goal. To survive the trials of the voyage he needs one other quality, moral and intellectual integrity. Mies van der Rohe, who succeeded Gropius at the Bauhaus, and is one of the greatest of living architects, said: 'Reason is the basis of all human work. I throw out everything that is not reasonable, even things very dear to my heart. I don't want to be interesting, I want to be good.'

[1] R. Wittkower, *Architectura i Principles in the Age of Humanism*, London, 1953.

Correspondence

The Editor, RIBA JOURNAL

The One-Man Practice

Dear Sir, – I was much interested in the letter to the JOURNAL about an architect who recently designed and carried out the building of a school on his own as I have also just completed a school in similar circumstances and I must say it is a very satisfying experience indeed.

The one-man practice means that one must be healthy in the first place and be able to always be 'on the ball', you cannot have long holidays and you must carefully balance one's work with one's relaxation in order to be on topline all the time. There are periods of intense activity and of course lulls.

From the practice organisation it means having one large job at a time with perhaps some smaller jobs, but not too many otherwise you will never be in the office but visiting sites all the time with no work being done on the drawing-board. The biggest headache is to get this one large job at the right time.

However, there are clients who definitely want architects to give them personal service all through the piece. These are people who may have had a bad experience with one of the bigger firms, but are more likely to be persons who have a great interest in their buildings other than financial and who wish to agree every detail with the designer himself. This leads the architect to have highly personal relationships with his clients, and in many cases with the builders, and I think results in buildings of a higher quality.

I think it would be very unfair and undesirable to reduce the fees as your correspondent suggests. In the first case the clients get the same or better attention, things also usually move faster as the job does not have to take its place in the queue as it must in the larger offices and I say this with much experience with larger firms. The overheads may not be so great, but this is more than offset by periods of inactivity; I have been over a year without earning a cent. During these periods I usually do competitions with doubtful success more with the intention of keeping my hand in than as any source of work.

Yours faithfully,

H. CULLERNE PRATT [*A*]

Dear Sir, – While one is pleased to note the considerable envy which your 'unknown' correspondent regards the 'one-man practice', in the November JOURNAL, we must, however, take issue with him at once on his suggestion that because our overheads are minimum, we be subjected to a revised fee basis with local authorities. This is a most extraordinary and retrograde suggestion.

Some local authorities already knock a substantial portion off the RIBA Scale. The single practitioner is in a much more vulnerable position than the larger London practices who can object to fee cutting, with less risk.

The one-man office may have low overheads, but in return offers full time attention to all matters at principal level. Overheads become very high the moment an assistant is required, and like others we have to pay high salaries to inexperienced assistants straight from architectural school, which are inflated by practices with large schemes of a repetitive nature, and this reduces our one-man's income to assistant level.

As a single practitioner, I roll out of bed on to the drawing board at 8 a.m., lunch on a tray and roll off the board in the evening in time for the ten o'clock news, then to bed and insomnia. This is an architectural life with a vengeance.

Yours faithfully,

'ASSOCIATE'

Dear Sir, – Your correspondent on the above topic puts forward a most intriguing proposal and as one practising on my own I am interested.

My work comprises some 12 to 20 jobs in varying stages of completion and I would imagine others with like practices are similarly placed. Are we to try to fit a £200,000 job into this programme? I suspect, if we obtained such a commission, we would at once obtain help. Suppose we did not. Would the new client be prepared to wait two or three years for his tender stage and would our present clients take kindly to a falling off in personal attention?

I somehow imagine your correspondent is an employee who is perhaps experienced in school design and who sees the broad vistas of a lucrative practice stretching to the horizon. After all £12,000 in fees (6 per cent on a £200,000 school) is quite a useful foundation upon which to build a practice.

Yours sincerely,

'ALONE'

Architectural Education

Dear Sir, – I have been trying to draw attention, together with a few others, for some time to the unfortunate effects which are likely to arise from the proposed changes in the arrangements for entry to the profession. It is not these changes themselves that are at fault so much as the order in which it is proposed to carry them out. As a result of previous requests for clarification and for urgent consideration of the situation likely to follow September 1961, it was particularly unfortunate that the recent statement to the professional press gave no indication of any progress in the overall arrangements for new student intake but, on the contrary, implied the bringing forward of the date for the raising of standard of entry to two 'A' level up to the present day.

Let the facts again be set down. Based on the Board's figures published in the JOURNAL of November 1959 and taken over the three years 1955–58, the average number of new students joining the schools is 991 per annum, of which 248 have two 'A' levels. Unless these proportions have been grossly modified in the last year the drop in intake to the profession through the schools in 1961 will be of the order of 743 or 75 per cent. Of these there will be many who, for sound economic reasons, cannot be supported for a further two years at secondary school. Unless some realistic caretaker arrangement can be devised by which all these students can be accepted into offices and schools in September next year they will be almost certainly lost to other professions or industries which are able to offer a less dreamy-eyed view of the future.

In the interim there probably remain many students who have not yet enrolled for Probationship from this year's potential intake. Some because they have perhaps a further subject in GCE to take at the November examinations, others because there is no compulsion, and little incentive, to become a Probationer instantly, have not yet applied. All of these students are now recommended to have two 'A' levels before making their applications. In other words, to go back to their secondary schools for two years more whether they can afford it or not.

It is clear that some further clarification of the Institute's attitude towards these students and their alternative form of training is most urgently needed.

Yours faithfully,

ALAN MILLER [*F*]
Head of Architectural Department
College of Art, Wolverhampton

Sir, – A note has recently appeared in the *Architects' Journal* purporting to clarify the Council decision regarding the date after which two 'A' level GCE subjects will be required for probationership; another note has appeared in the RIBA JOURNAL regarding the duty of members to inform prospective probationers of the qualifications required.

I shall find it difficult enough to explain to an applicant that 1 September 1961 apparently means 31 December 1960, or that his attainment of the present qualifications in July 1961 will be useless unless he can produce the official results before 1 September; however, I *can* explain to him that his five 'O' levels probably entitle him to become a 'technician':

'No, I don't know what "technician" means. . . .

No, there are no qualifications laid down. . . .

No, there are no courses available yet. . . .

No, I don't know if he will be associated with the RIBA. . . .

No, I can't say when his questions will be answered. . . .

No, I don't know where I shall find another assistant. . . .

Yes, it *does* look as if we shall lose at least two years' entries into the profession . . . a pity, isn't it?'

Yours faithfully,

GUY L. V. WALKER [*A*]

New Format of the Journal

Dear Sir, – While we weren't looking, your 'new-look-crest' draughtsman has dewhiskered his lions, pulled up their sagging trousers, stiffened their tails and straightened up their curious column. And stuck the lot a sixteenth lower in a bigger and blacker box.

As one of the original critics of the new crest, I must say 'Thank-you-for-trying'. But, alas, if the JOURNAL is now doomed to 'Bauhaus 1926' typography, even this latest heraldic whirligig is surely a bit incongruous.

Yours faithfully,

DAVID MORRISON [*A*]

Practice Notes

PRACTICE QUERIES

As reported in the December 1960 JOURNAL (page 48) Practice Notes are to be continued as a vehicle for the Practice Committee. The Notes published below include the first of a series of practice queries dealt with in question-and-answer form.

1. Fees for work for Housing Societies

Q: We have been approached by a Housing Association, with a view to preparing drawings, obtaining the necessary consents and supplying ¼ in. scale working drawings for a group of about 60 bungalows. We have been asked to indicate what our fees would be.

Is there a scale specifically intended for this type of work for Housing Associations, or does the scale for similar services to speculative builders apply?

A: This is not the type of work to which the RIBA's Scale of Fees for State Aided Housing Schemes would apply since the Practice Committee decided in 1959 that this Scale was not applicable to work carried out for Housing Societies whose building schemes were no longer State aided.

Nor would it be appropriate to try and base fees on the Scale recently approved for work in connection with speculative housing development, since that Scale was drafted to allow the architect remuneration on the basis of the selling price of the house to the public.

The conditions of the RIBA Scale of Professional Charges should therefore be applied in so far as they relate to partial services and make any necessary deduction under Clause 2(i) in respect of repetition work. If supervision is required then an additional fee could also be charged for this.

2. Printing of name and address on envelopes: tantamount to advertising?

Q: May I have my name, professional affix and address printed on the rear flap of my business envelopes? Would this be tantamount to advertising and so contrary to the Code of Professional Conduct?

A: There would be no objection to your suggestion to have your name, affix and address printed on the rear flap of business envelopes.

3. Architects' obligation to issue Variation Order: responsibility for checking the final account. (RIBA Form of Contract.)

Q: (*a*) Is the architect under an obligation to *issue* a Variation Order to the surveyor (either in writing, verbal or drawing, etc.), or merely to notify him when a variation occurs?

(*b*) Is the surveyor under an obligation to ascertain any variation on the site without being instructed that a variation has occurred?

It appears that as the surveyor is designated to prepare the final statement of account he is responsible to see that it is correct. From this it would appear that the onus of including *all* variations (whether he is notified of such by the architect or anyone or not), rests upon the surveyor.

A: Any variation which is authorised by the architect during the progress of the building works should be followed up by a variation order. It is not obligatory under the contract for the architect to issue the written variation order immediately the variation is decided upon; he is able to issue that order up to seven days after his oral instruction. The quantity surveyor has no authority to price any variation unless there has, in fact, been a written variation order covering it.

The House of Lords in the recent case of Burden *v.* the Swansea Corporation 1957 1 WLR 1167, held that the architect was not bound to accept the determination of a quantity surveyor when issuing his certificates. Therefore it can hardly be said to be the surveyor's responsibility to see that the final account is correct. This must be the architect's duty.

4. Alteration Work: fee for provision of accurate survey showing alterations in detail

Q: We have just finished some alterations on a building for which we charged a fee based on the normal Scale which the client duly paid. The client then asked for an accurate survey of the building showing the new alterations in the form of counters, lighting equipment, toilets, etc. The client claimed that this service was covered by the fee already paid as a small survey was made before the alterations were drawn. We did not know that this survey was intended for record purposes and when asked to prepare the final survey showing the alterations, we measured everything and sent in an account appropriate to this.

A: The survey which the client requested on the completion of the works is not something which would normally fall within the services to be performed under the RIBA Scale. Therefore an additional fee should be charged.

IN PARLIAMENT

Architects in Local Government. Mr Deedes asked the Minister of Housing and Local Government and Minister for Welsh Affairs whether his attention has been drawn to the list recently published by the Royal Institute of British Architects of local authorities who do not employ architects; and what steps he has taken to encourage those local authorities to remedy this deficiency.

Mr H. Brooke: Yes; I have seen this list and also the associated circular entitled 'The Architect in Local Government'. The list refers to authorities who do not employ chief architects; a number of them do in fact employ architects although not in chief posts. Within recent months I have frequently expressed my concern, both in Parliament and at meetings of local authority representatives, about the standard of design in local authority building, some of which is very good, but by no means all. I am considering whether there is anything more I can do to ensure a higher standard all round, and I am taking account of the views expressed by professional bodies. (22 November 1960.)

Green Belts. Lieut.-Colonel Bromley-Davenport asked the Minister of Housing and Local Government and Minister for Welsh Affairs how many plans for the provision of green belts he has received from local authorities; how long such plans have been under consideration; and when he expects to make a decision in respect of all or some of them.

Mr Brooke: The London green belt is already shown in the approved development plans of the counties concerned. Proposals for extending the London green belt and for establishing green belts elsewhere are usually submitted in two stages; first, a sketch plan showing broadly the area to be covered, and second, a proposal to include in the development plan the precise boundaries of the belt.

Sixty-eight sketch plans have been received, five for extension of the London green belt and the remainder for 31 other green belts; and decisions have been given on all but five, of which four are for one reason or another in suspense and the fifth, submitted in August 1960, is under consideration. I have before me 13 proposals for including green belts in development plans. These have been submitted at various dates from 1958 onwards, and I will reach decisions on all of them as soon as I can. In the meantime, during the preliminary stages before a green belt is incorporated in the development plan, the local planning authorities concerned have been asked to apply provisionally the development control appropriate to a green belt. (15 November 1960.)

Planning (Minister). Mrs Butler asked the Prime Minister what consideration he has given to the appointment of a Minister of Planning.

The Prime Minister (Mr Harold Macmillan): As I told the hon. Member of the 27th of October, it is doubtful whether any useful purpose would be served by such an appointment.

Mrs Butler: Does the Prime Minister realise that, in the speculative building boom we are now entering, local planning authorities increasingly need the help of a positive planning policy from a Minister who is responsible for traffic movement and commercial and industrial locations as well as planning the present planning administration, and is he prepared to see the erosion of the green belts in the countryside, the increased traffic chaos and the urban congestion and disfigurement which will be quite inevitable unless the Government make a new and positive approach to the planning problem?

The Prime Minister: This is a question of whether a Minister of Planning should be appointed. I should have thought that it was the function of each Minister to indicate what planning is required in the sphere of his own department and for the Cabinet collectively to co-ordinate the planning.

Mr Gaitskell: Is the right hon. Gentleman aware that the problems of urban development, transport and industrial and

commercial location are all intimately bound up together? Can he tell us how these problems can be solved without a much closer degree of continuous co-ordination than is provided by an occasional Cabinet meeting?

The Prime Minister: I think that the right hon. Gentleman knows the working of Cabinet and Cabinet Committees, and I should have thought that the question is not one that is just resolved by appointing a new Minister.

Mr Gaitskell: It is not resolved by appointing a new Minister, but is the Prime Minister aware that it cannot be resolved for the country as a whole unless someone or other in Whitehall is responsible for looking at this problem as a whole? Will he please consider this matter?

The Prime Minister: Of course, I will consider it. The question is a very wide one concerning a Minister of Planning in general without definition of economic planning, local government planning or any other kind of planning, and it seems to me that such a Minister would not be a valuable addition to our machinery of Government. (6 December 1960.)

(See the RIBA Statement 'Rebuilding Our Cities', September 1960 JOURNAL, page 406.)

Houses of Modern Design (Planning Policy). Mr Dingle Foot asked the Minister of Housing and Local Government and Minister for Welsh Affairs if he will make a statement regarding the policy of his department in dealing with appeals from the refusal of planning authorities to grant planning permission for the erection of dwelling houses of modern design.

Mr H. Brooke: My policy is to accept the design of a new house where I consider it to be good in itself and properly related to its surroundings, whether it is traditional or modern. (29 November 1960.)

Planning Appeals. Mr Dingle Foot asked the Minister of Housing and Local Government and Minister for Welsh Affairs if he will state the average time taken by his Department during the last three years in dealing with appeals from planning authorities under Section 16 (1) of the Town and Country Planning Act, 1947, in cases where the parties disagree with a public inquiry; and whether he will take steps to expedite the decision of such appeals.

Sir K. Joseph: About five months. My right hon. Friend is doing all he can to reduce this, but where no inquiry is held the main factor is the time taken by the parties in submitting their written statements. (29 November 1960.)

MINISTRY OF AGRICULTURE, FISHERIES AND FOOD

Ministry's requirements in connection with Tenders and Vouchers for grant-aided work on the basis of actual costs. The Ministry have asked the RIBA to publish a note on their procedure of examining tenders before approving grants. These grants arise under the Farm Improvement Scheme (Agriculture Act 1957), the Horticulture Improvement Scheme (Horticulture Act 1960) and the schemes for the rehabilitation of livestock rearing land (Hill Farming and Livestock Rearing Acts 1946–57).

The Ministry require two or, if possible, three competitive tenders on a fixed basis and normally approve the lowest. Single tenders may be accepted only in exceptional circumstances. Original tenders, which will be returned as soon as possible, must be submitted to the Ministry in every case: copies or extracts are not regarded as satisfactory alternatives and their Divisional Officers are not authorised to accept them.

The Ministry's Divisional Officers have been instructed that when scrutinising claims for payment they must obtain the actual contractor's detailed account, which they are required to check against the approved specification and tender to ensure that grant is paid only for eligible work that has been approved. They are not allowed to accept a certificate from a professional adviser stating the amount due and paid.

The Ministry feels that these requirements are necessary in accounting for public money.

LONDON COUNTY COUNCIL

Question to the Chairman of the Town Planning Committee at the Council Meeting on 22 November 1960. On the basis of the experience of the Council during the last 12 months, what is the approximate average time taken in the arranging of (i) planning appeals; and (ii) notification of the decision of the Minister of Housing and Local Government to the parties?

Reply. (i) Five months; (ii) Four to six weeks.

MINISTRY OF HOUSING AND LOCAL GOVERNMENT

Improvement Grants under the Housing Acts. Provisions for Payment of Fees. In view of the increase in the allocation of Improvement Grants (Ministry of Housing and Local Government hopes that the number will reach £250,000 a year), the note on the arrangements for payment of fees may be helpful. This amplifies the Practice Note published in the October 1959 JOURNAL.

Fees for architectural work in connection with alterations submitted for a grant are the sole responsibility of the client. The architect's fees should be calculated on the basis of the total cost of the work according to the Scale of Professional Charges (Clause 2(ii) will apply).

The local authority may include in its grant towards the total cost of the improvements which qualify for consideration, a sum towards professional fees but,

(1) The total grant will not normally exceed £400.

(2) The local authority assess the amount of fees which will be considered for a grant according to a special scale agreed jointly with the Ministry and the RICS for this work. This is as follows:

1. *For the Preparation of Specifications without Plans or Drawings*

   7½ per cent on the approved cost of executing the work.

2. *For the Preparation of Specifications where Plans or Drawings are required*

   10 per cent on the approved cost of executing the work.

Corporate Bodies' Contracts Act, 1960. The effect of this Act which came into force on 29 July 1960 is explained in the Ministry's circular No. 51/60.

Hitherto the contracts of local authorities (with certain limited exceptions) have needed to be under seal. The Act now places local authorities substantially in the position of private persons: where a contract between private persons would by law be required to be in writing signed by the parties, a written contract will bind the council if signed by a person acting under their authority, express or implied; and an oral contract which would be valid between private persons will bind the council if made by a person acting under their authority, express or implied. Documents which, under the general law, would require to be sealed if executed by private persons will still need to be sealed by local authorities but, save in these instances, the absence of the seal will not prevent a local authority from being bound in contract.

As a result of this the service agreement between an architect and local authority may not need to be signed under seal. Where an officer signs the agreement on behalf of the local authority, the architect should be satisfied that the officer has a proper authority to act on behalf of his Council.

Selected Planning Appeals. Volume Two of the Second Series published by HMSO in November 1960, price 3*s.* 6*d.*

A B S

Professional Indemnity Insurance

The increase in premium rates for this type of cover however unwelcome are due to the adverse results experienced by the various underwriting groups. There is no doubt that the public are much more claims conscious than before the war and, together with the very high increase in the cost of building, this has had an important bearing on the size of settled claims. While certain of the Underwriters hitherto covering Professional Indemnity risks have ceased to accept this type of business, those Underwriters continuing to provide this cover have increased premiums and in some cases restricted the scope of the policy.

The ABS Insurance Agency, Ltd, at RIBA, 66 Portland Place, W1, is in close touch with the Underwriters at Lloyds and with the major Insurance Companies transacting this business and the Manager will assist Architects to obtain satisfactory cover at a reasonable rate of premium. A competitive quotation will be obtained for the cover required in any case where the Architect is not satisfied with his existing arrangements.

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From a Correspondent

The telephone rang on the desk of an architect we shall call Edward.

'Hullo.'

'Edward, this is John. Nice to hear your voice. Almost a stranger.'

'Yes, it is rather a long time. What can I do for you?'

'I rang to ask if you are going to the Hants and Isle of Wight meeting tomorrow night. I wanted to know where Potters Heron is.'

'What meeting is this?'

'You know, old man, this so-called informal meeting to meet the RIBA President. It's supposed to be a new idea, instead of an annual dinner dance.'

'Oh yes. I hadn't realised that it was tomorrow. Potters Heron? Yes, it's that road-house halfway between Winchester and Romsey. Not a bad place for a meal but I must say a queer spot to entertain "The Great God of the RIBA."'

'Oh, I don't know. It's not a bad idea to get away from the stuffy formal dinner-dance. It's about as near as we'll ever get to the President. They just live in the clouds up at the RIBA and couldn't care less what happens in the country as long as we pay our subs. I agree with you about the dinner-dances. I used to go but they were always so dull. Ghastly back-scratching speeches and always the pathetic sight of the great concord of official guests trying to look as though they were enjoying themselves, only kept going with the drinks supplied at our expense. I got fed up with them.'

'Oh, come off it, Edward. They couldn't have been as bad as that, but I don't expect they did much to improve our relationship with the RIBA. Why don't you make an effort to come along tomorrow, have a night out and see what happens? Let me pick you up, then you can show me the way.'

'All right then. Perhaps I will.'

John picked up Edward, but the two, except for traffic directions, hardly said a word to each other. They arrived at Potters Heron to find several faces they recognised already there and were soon engrossed in friendly conversation. The warmth of the bar and the first drinks soon began to soften the solid reluctance to let themselves go, and they were soon deep in conversation with fellow architects gathered round.

The Association President, Peter Sawyer, briefly welcomed the large gathering and introduced Sir William Holford and Gordon Ricketts. Sir William then spoke to the members about recent developments within the profession.

He finished saying 'Now I want to hear you talk. I want to hear about your problems and have your views on the RIBA and what you think it should be doing. If I cannot answer your questions, then Gordon Ricketts will.'

A discussion quickly started on the need for a draughtsman class, with many members expressing the view that recognition was urgent. The small country practices relied to a very great extent on the unqualified draughtsman. Now that the education standard for entry into the profession was being stepped up it was important, if schoolmasters were to continue encouraging boys to become architectural draughtsmen, that they be given some status as happened with technicians in other professions. Full voting membership of the RIBA was not wanted, nor should there be a back door entry to full membership.

The members went on to discuss salaries and the need for some standardisation between the pay of assistants in public and private offices. Some guidance from the RIBA on an overall pay scale would be welcome.

The discussion moved from pay to panels and to the value of the Voluntary Architects' Advisory Panels in Hampshire. Most principals in Hampshire serve on these Panels and a lengthy discussion developed with the meeting somewhat divided as to their merits.

In such an atmosphere of friendly open discussion, time went too quickly so that when a halt was called many questions on the order paper remained unanswered. The Association's senior Past President, Colonel R. F. Gutteridge, supported by Mr A. P. Ames, a junior member, expressed their appreciation of the meeting and thanked Sir William Holford and Gordon Ricketts for coming down to talk with them all in this very friendly informal way.

Members quickly gathered round the bar and the splendid buffet table the management had provided, or collected in groups happily continuing the discussion. Sir William and Gordon Ricketts moved freely among the members, hearing their many different problems and views. It was nearly midnight when the majority finally decided they must go home.

And now back to Edward and John:

'That was a splendid evening!'

'Yes, quite excellent. I would never have thought it possible. The President of the RIBA has always been a mysterious untouchable figure to me and the Secretary was only a name, but when you see them and talk to them as we have done this evening you realise what jolly good fellows they are, and how stupid you have been.'

'I was delighted to find how willing they were to listen to our views. Before, when we have felt something was wrong, it always seemed to be a hopeless task to get anything done about it.'

'Well, I do not imagine anything startling will come out of this meeting, but at least they must take back to the RIBA a much better idea of the problems we have in the Allied Societies.'

'I enjoyed the whole party immensely much better than the sticky dinner-dance'.

'Much, much better. I wouldn't mind meetings if they were always like that. Here we are. Thanks very much. I am delighted you rang me. I would never have gone on my own. Good night, John. You must bring your wife up one evening.'

'I would love to, Edward. Good night.'

Book Review

Heating and Hot Water Supply for Domestic and other Buildings.

By Colin Penn and Donald Soley. 9 in. 209 pp. illus. B. T. Batsford Ltd. 1960. £1 15*s*.

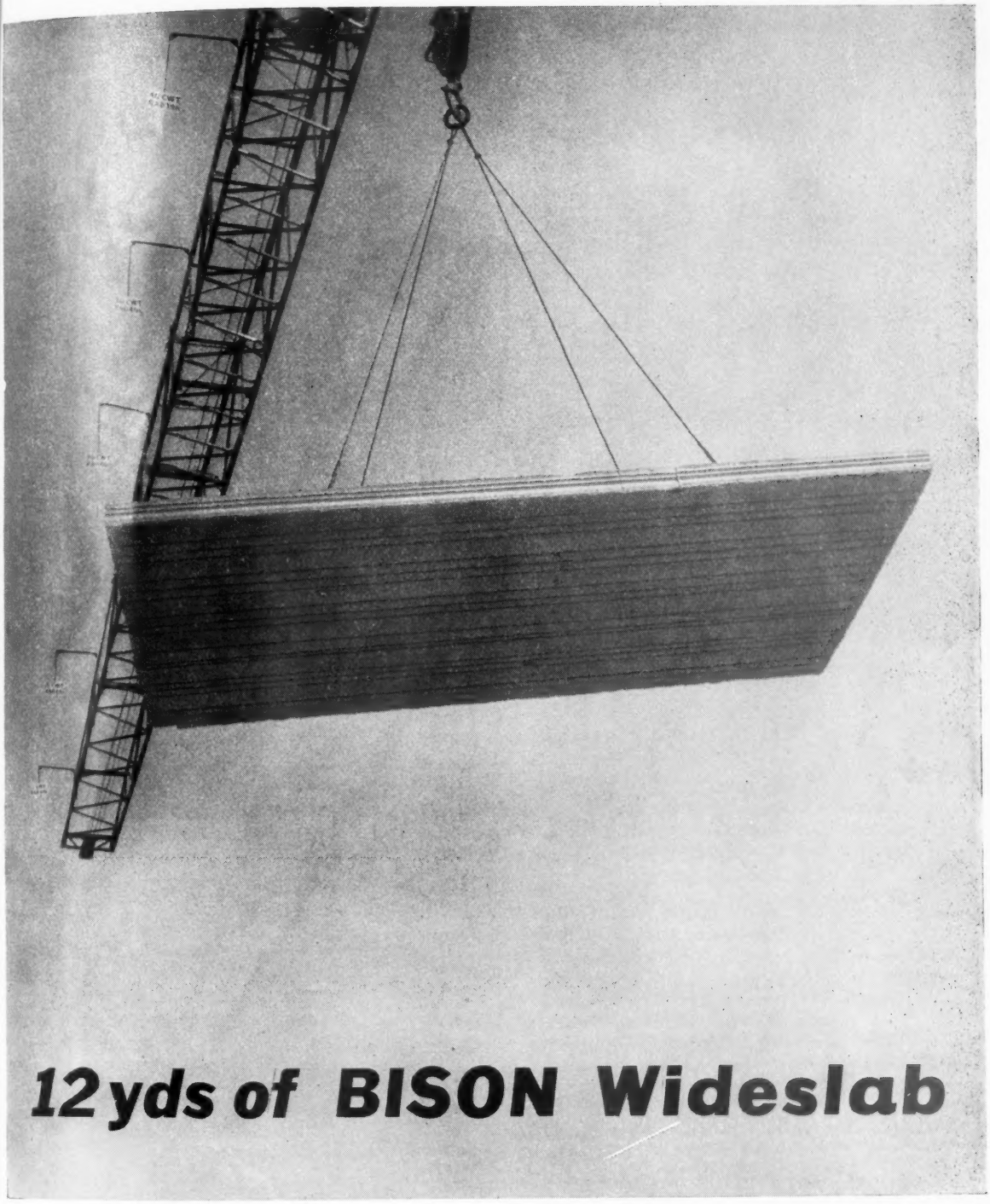
One of the many problems that the architect has to face, in designing any building for human habitation, is the creation of a suitable thermal environment for its occupants. To achieve this, it is necessary to determine what these thermal conditions are in relation to the external climatic conditions, the modifying effect of the enclosing materials and the heating plant to be specified. Most of the literature covering this field is divided into well defined categories; for example, books on thermal insulation, written by physicists, do not refer to heating plants, while books on heating systems, written by heating engineers, assume traditional building construction as their basis for heat loss calculations. As such books are written to appeal to a wider field than the architectural profession, which notoriously buys few books, usually only small sections of these are of use to the architectural student or practising architect who, after all, do not wish to become specialists in the physics of heat transfer or amateur heating engineers.

As the architect's task is one of the integration of all the factors that relate to thermal environment, the present literature is inadequate, in that it neglects to relate these factors. This book overcomes this fault in that its authors, an architect and a heating engineer, combine all the relevant factors together into a single book, written in language that is easily understood by the non-technical reader. It begins with definitions, human comfort requirements, thermal insulation and heat loss calculations and, after coverage of the whole field of heating plant, ends with a very important chapter on the specification of heating and hot water installations, including the often forgotten builder's work.

Since it has been written for architects, excessive technology and complex formula have been avoided. It assumes little knowledge of the subject, and therefore is an ideal textbook for the student. As it also contains all the information necessary, including tables, for the basic design of heating and hot water installations for small buildings, down to such details as the estimation of pipe sizes, it is an equally useful book for the practising architect. It should be noted, however, that it only relates to the choice and specification of plants for the small building, where a heating consultant would normally not be employed. It does not consider large buildings.

A concise book, clearly written and well illustrated, it covers the whole field adequately. The short bibliography could have been expanded with advantage, since it will often be necessary to refer to more advanced literature.

A. C. HARDY [*A*]



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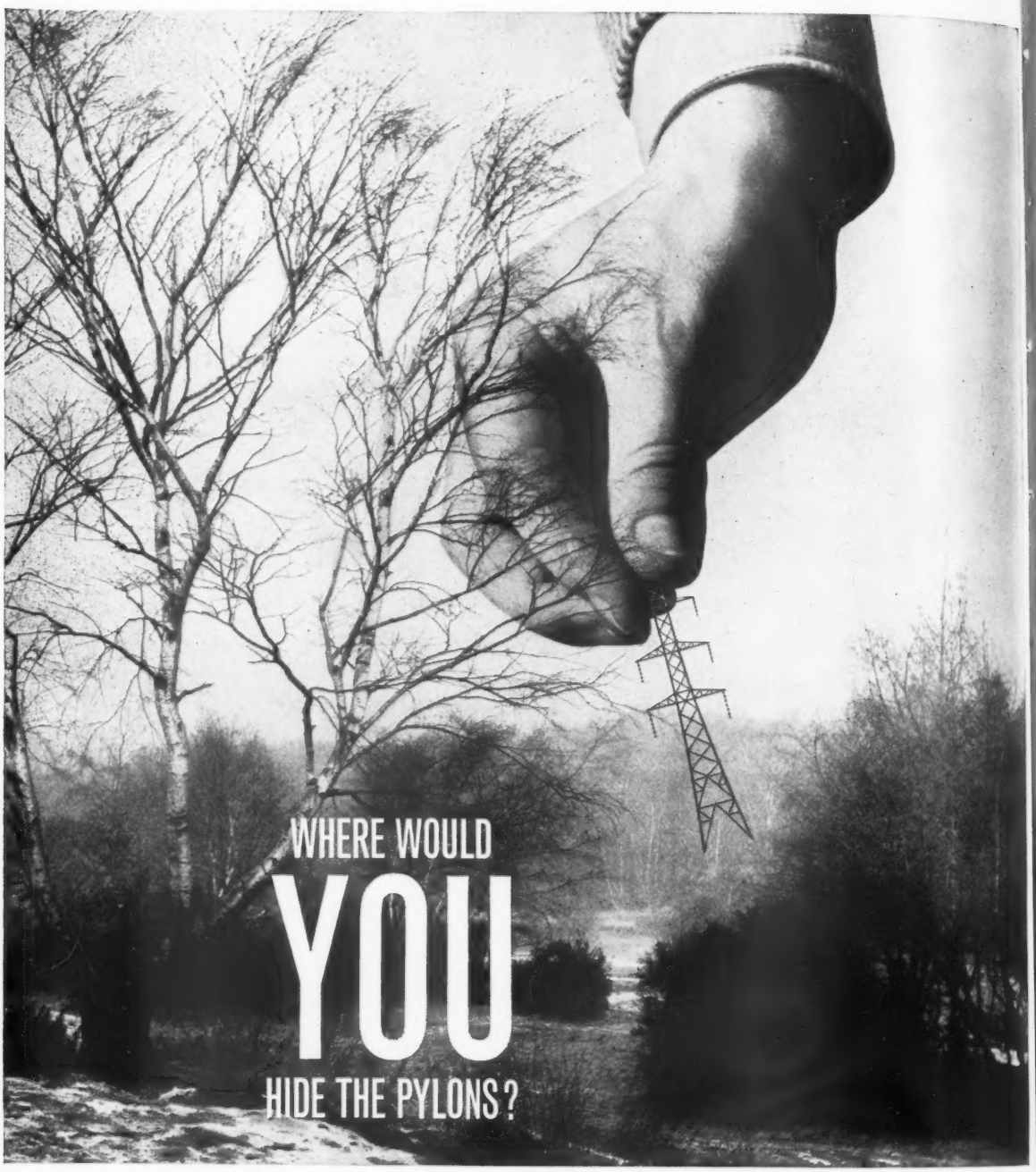

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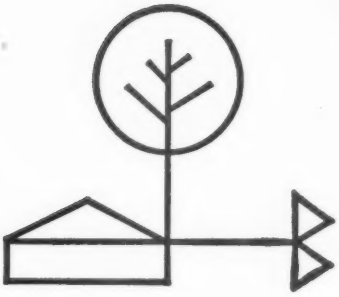

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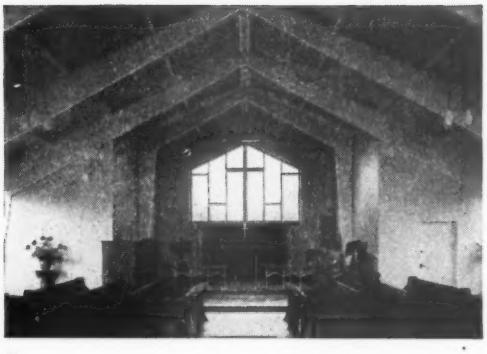

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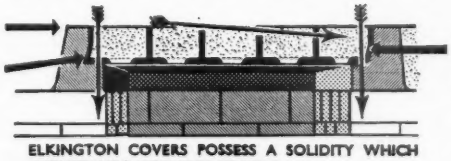

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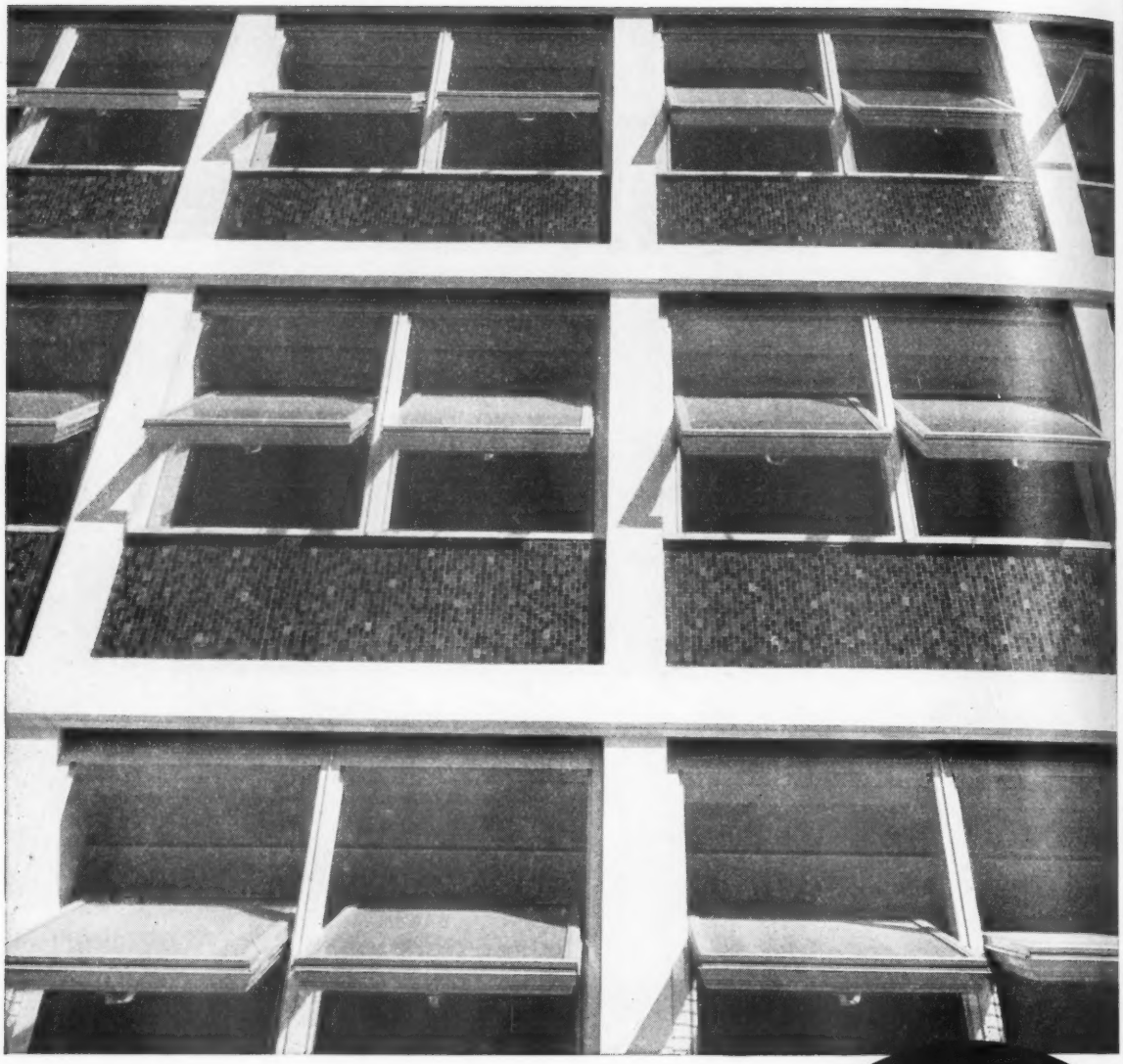

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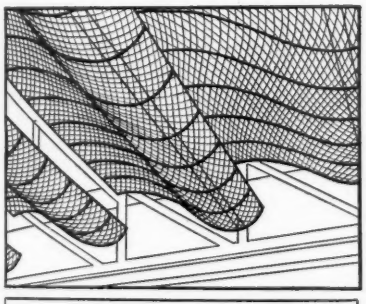

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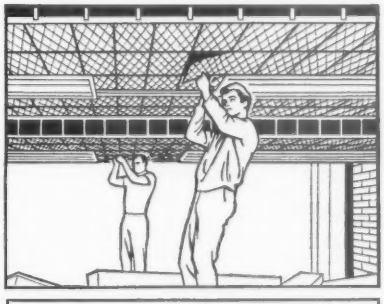

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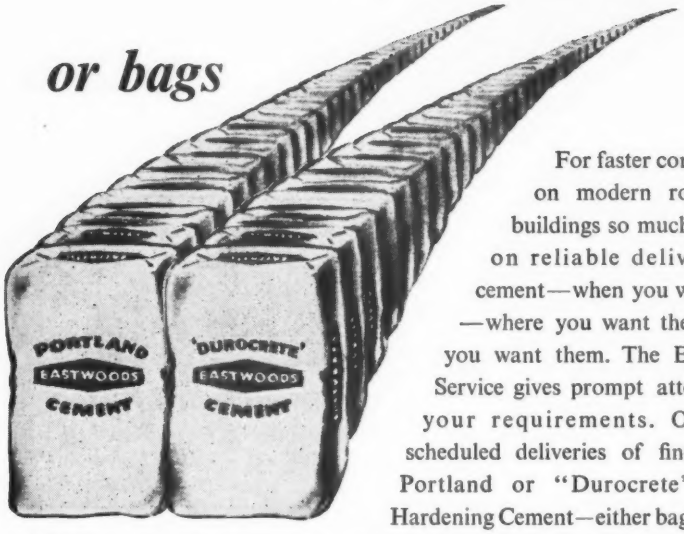

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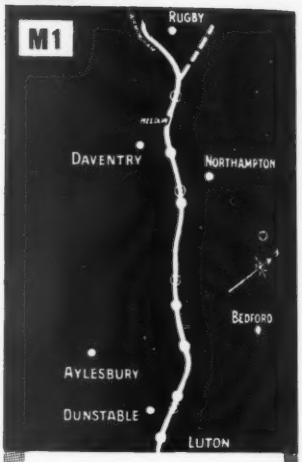

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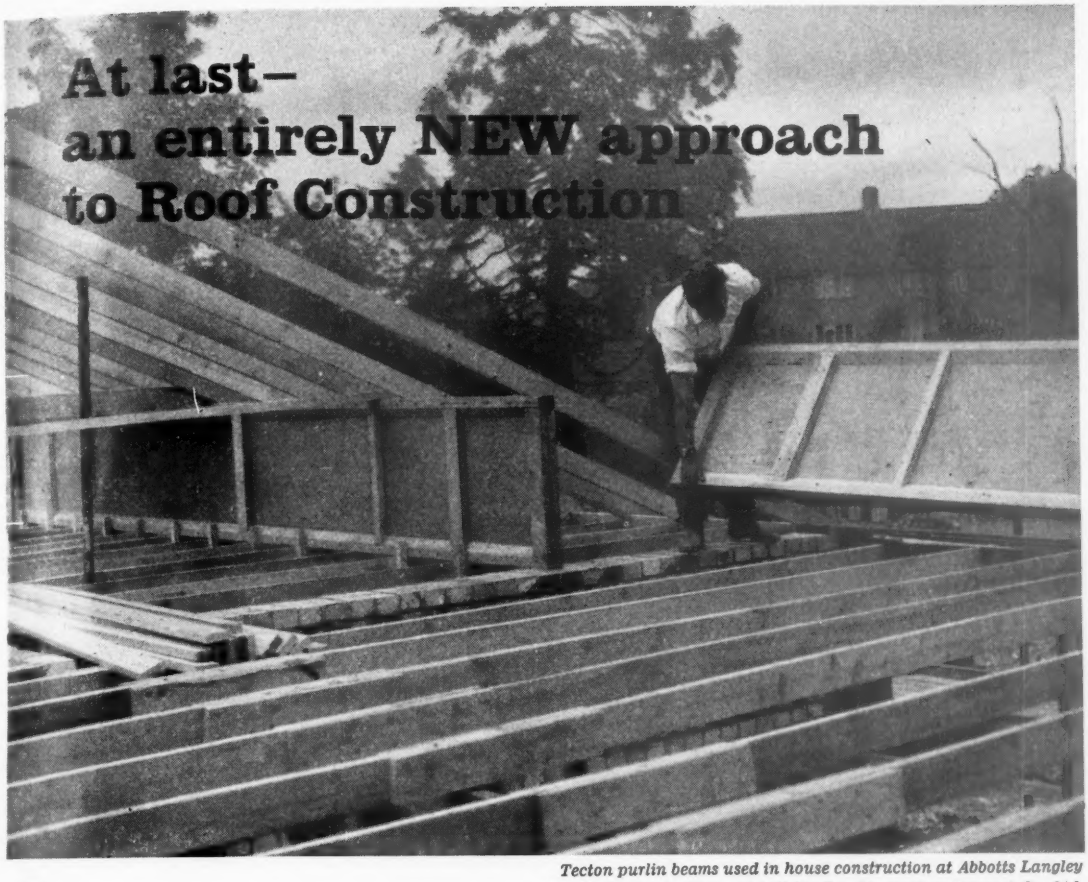

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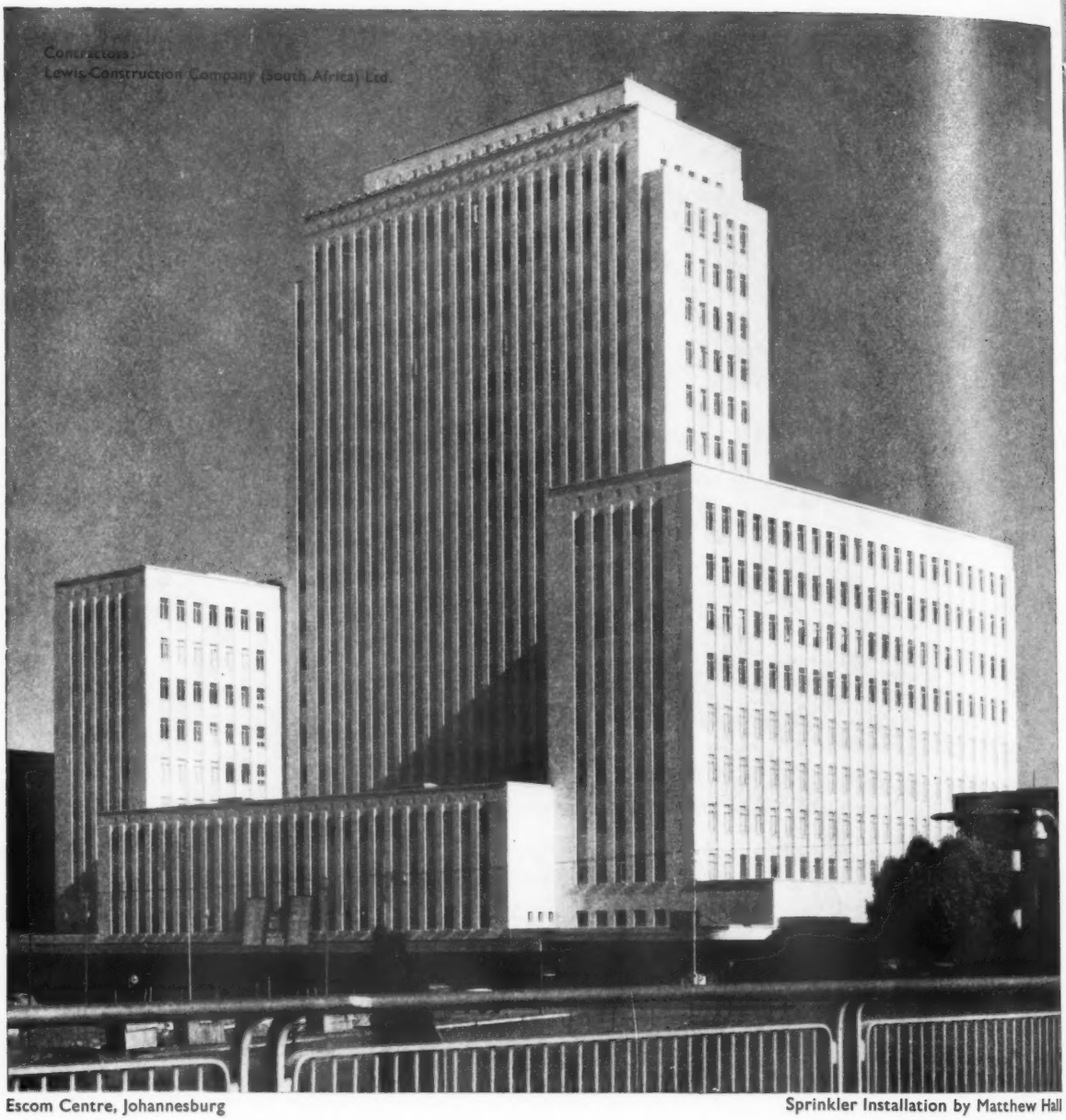

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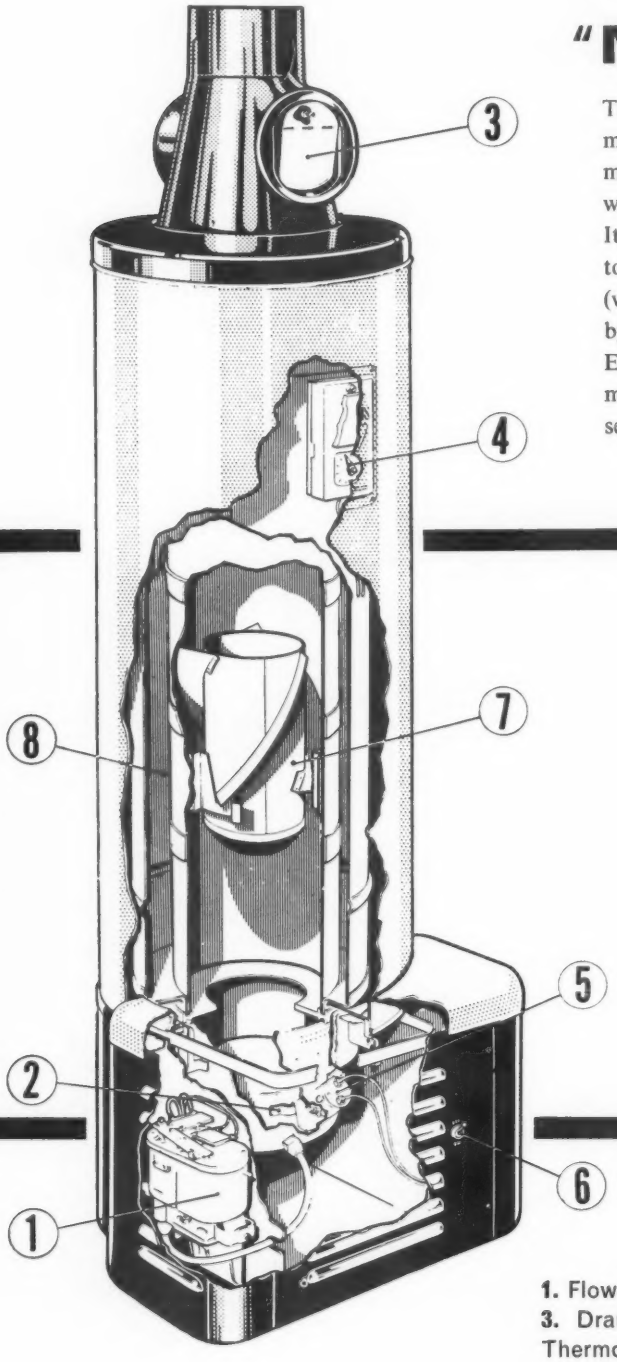

SUMMARY OF TECHNICAL DATA

The natural-draught vaporizing burner is fitted with electric ignition, and operates high-fire and off. 200-250 volts AC only.

Nominal output is 30,000 B.Th.U/hr, feeding radiators totalling 160 sq. ft surface area, or 110 sq. ft radiators combined with hot-water supply.

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Weight: 93 lbs.

Flue draught required: .06 w.g.

Fuel: regular grade kerosene.

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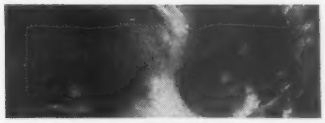

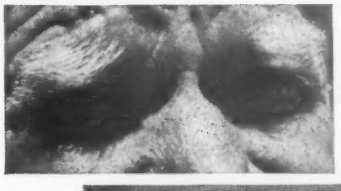

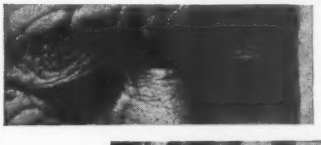
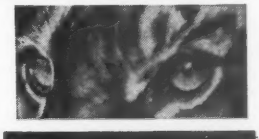

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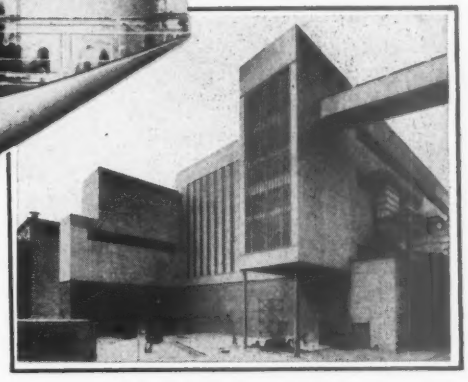
By courtesy : Central Electricity Authority, East Midland Region.



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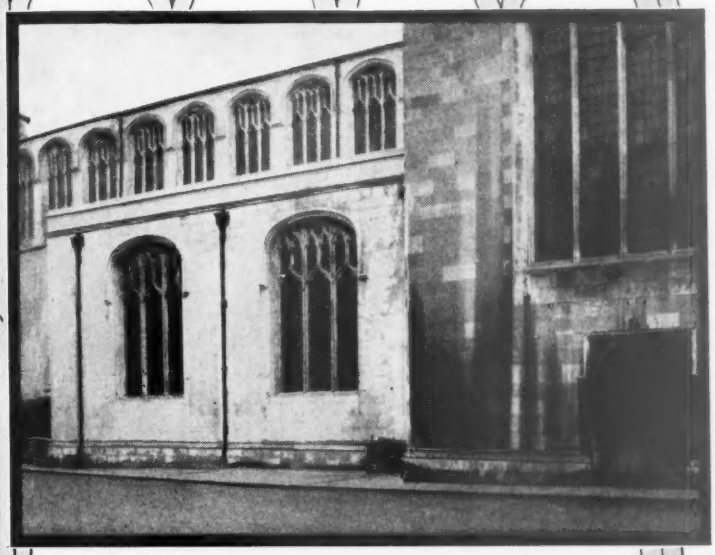

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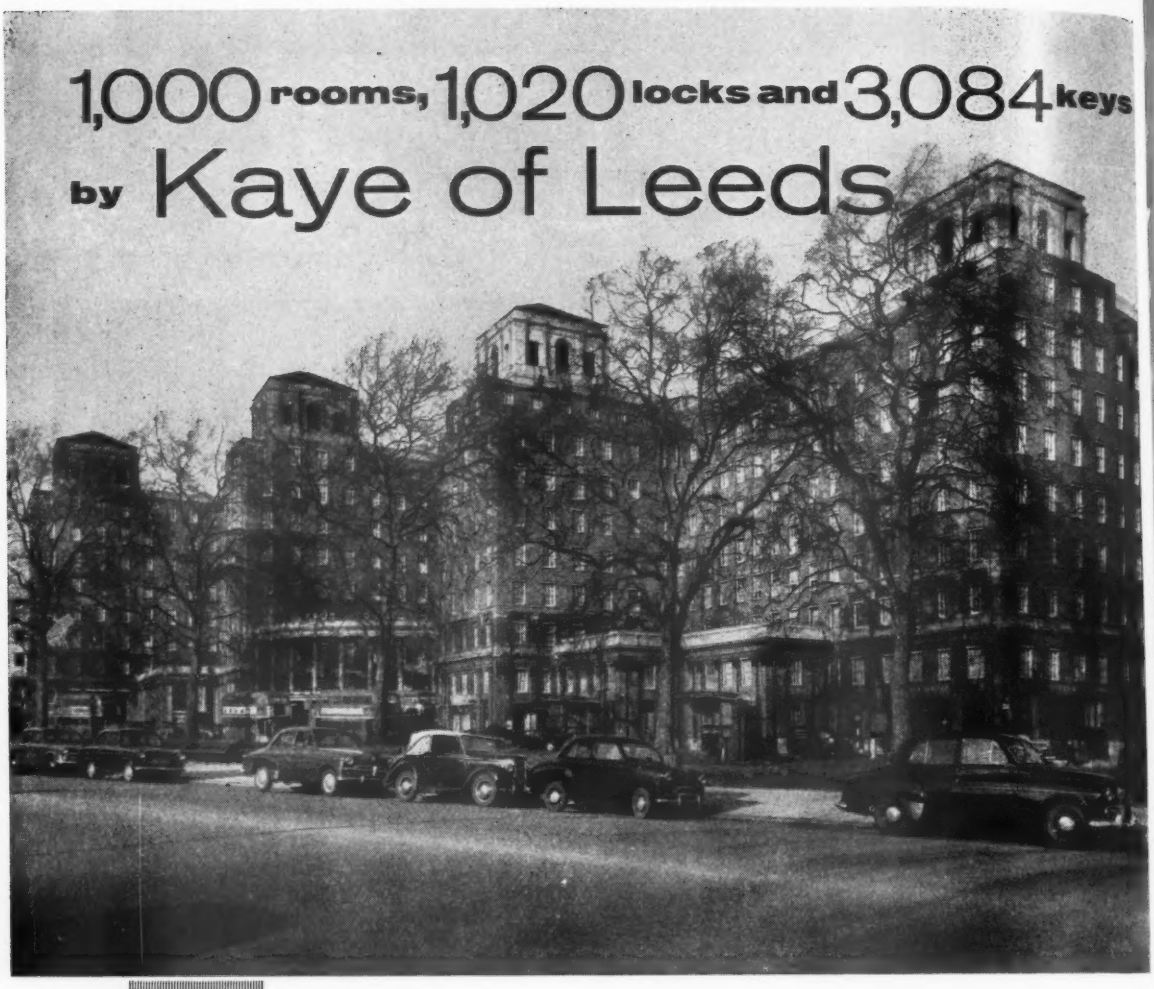

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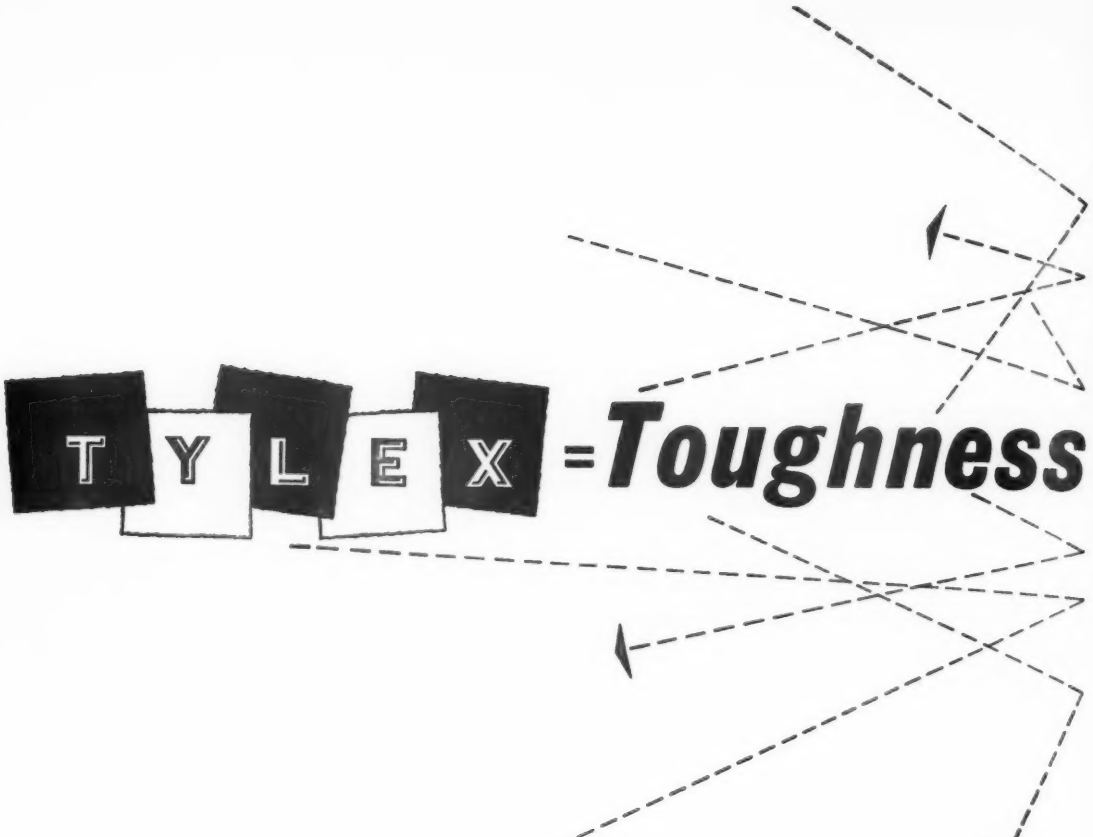

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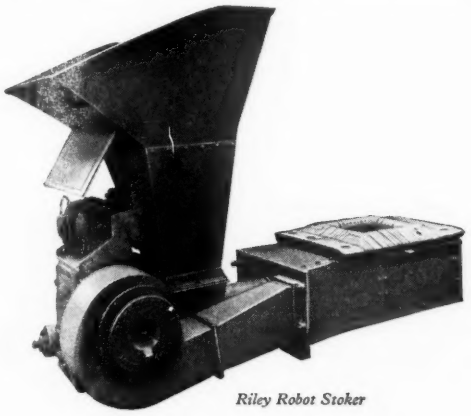

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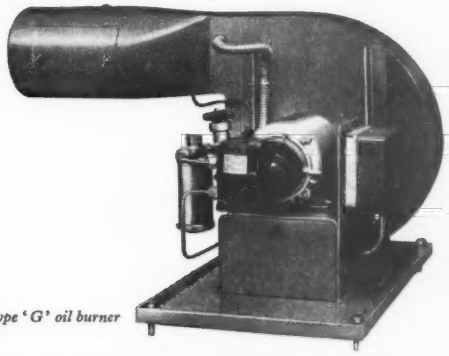

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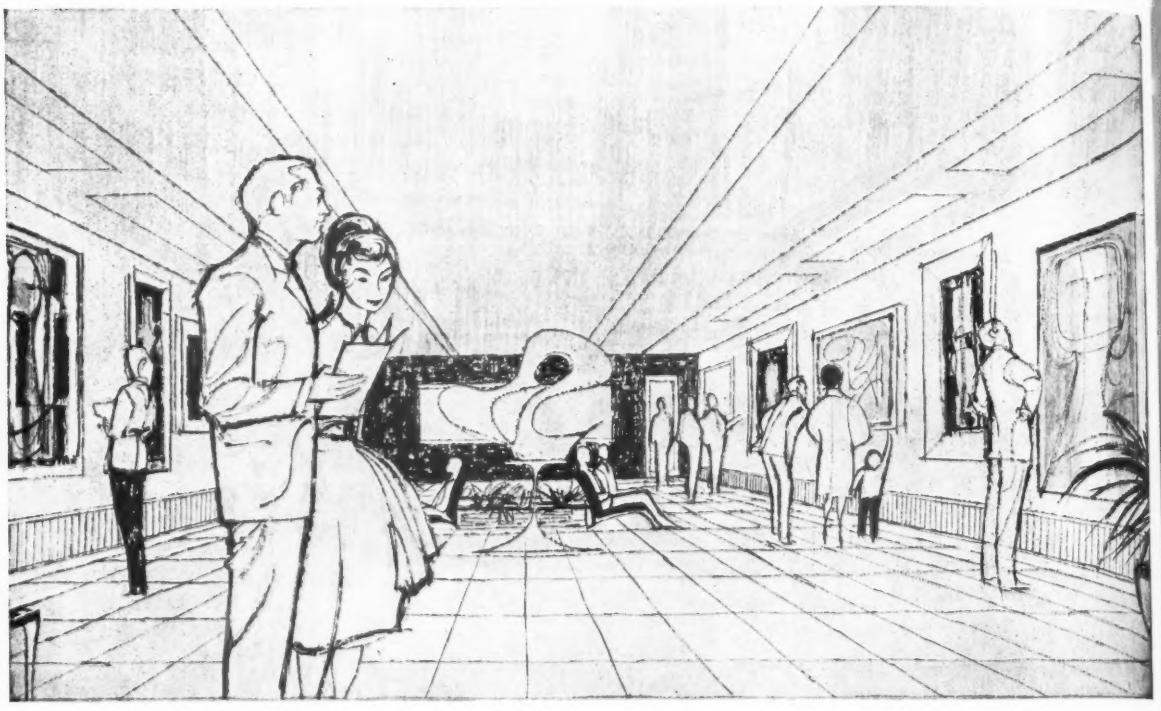

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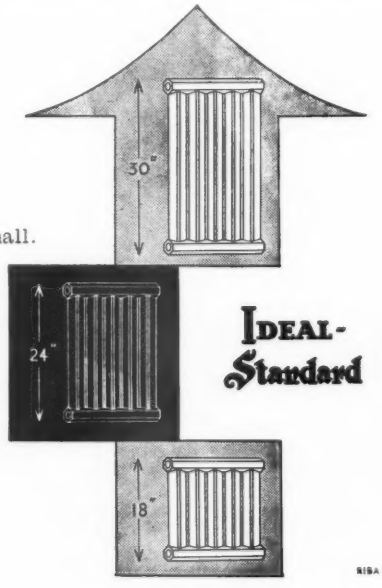

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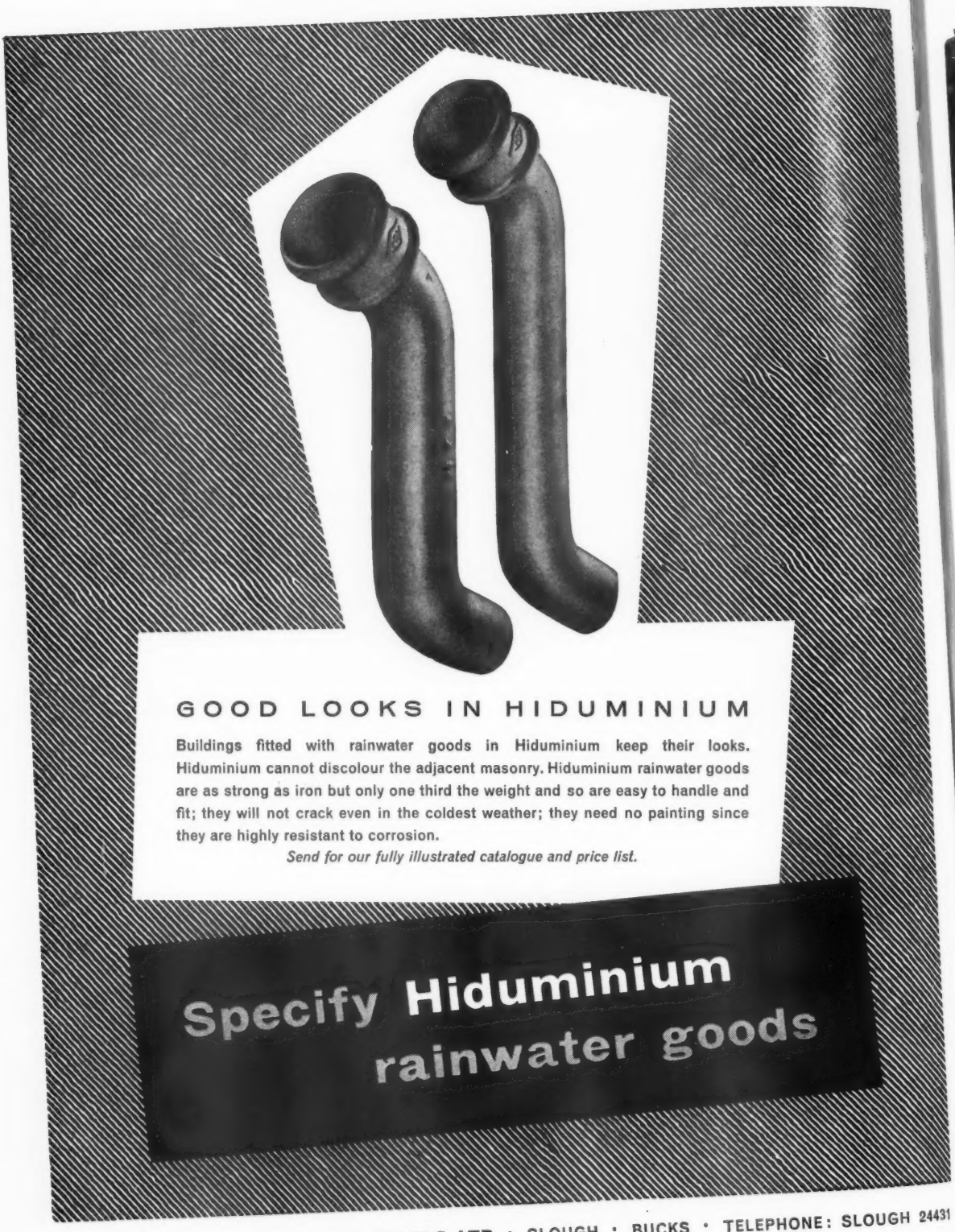

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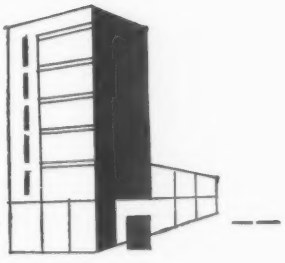

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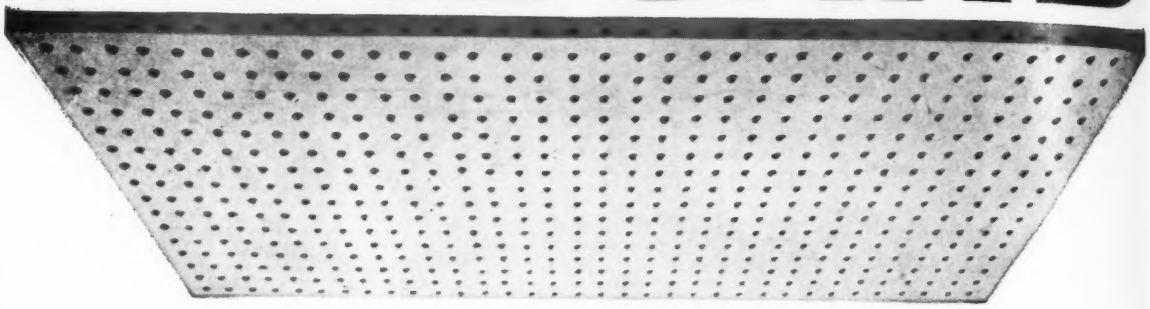

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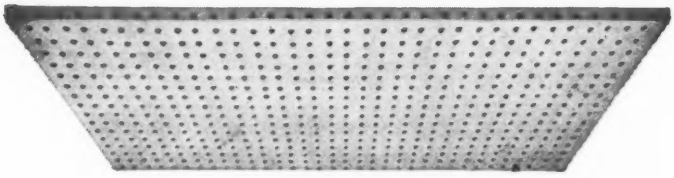

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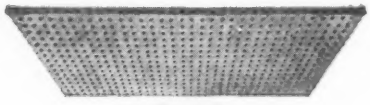

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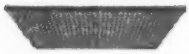

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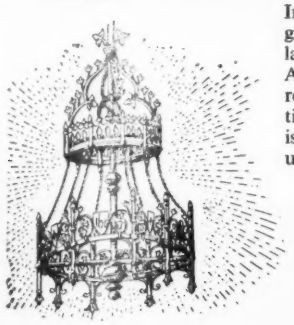

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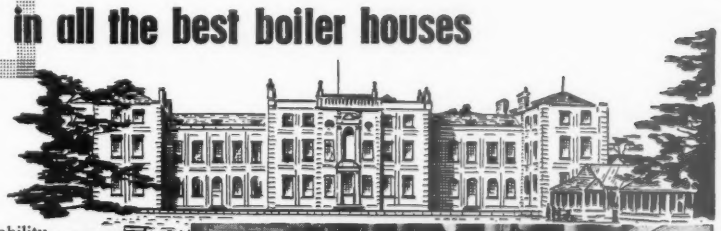

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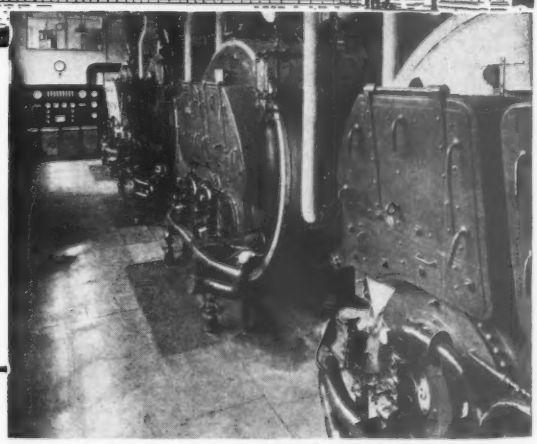

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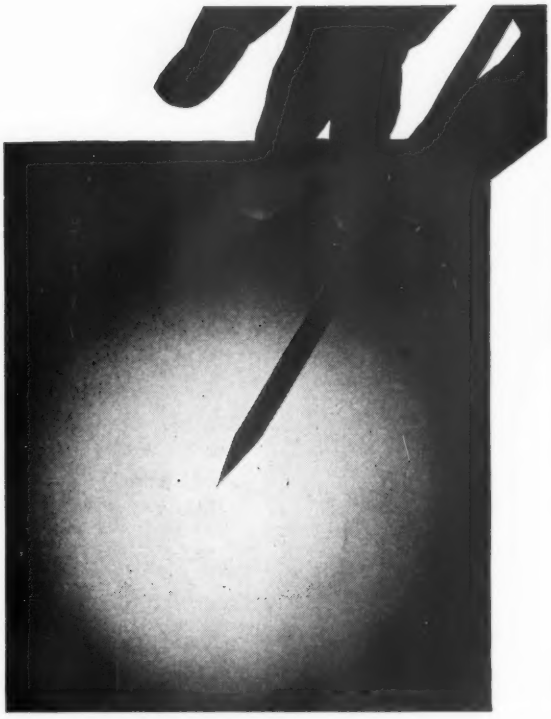

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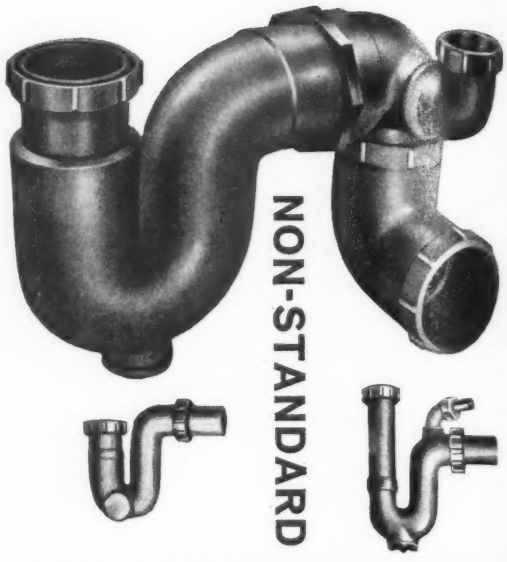

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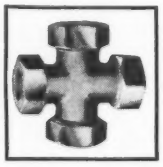

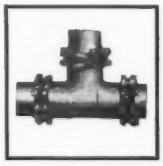

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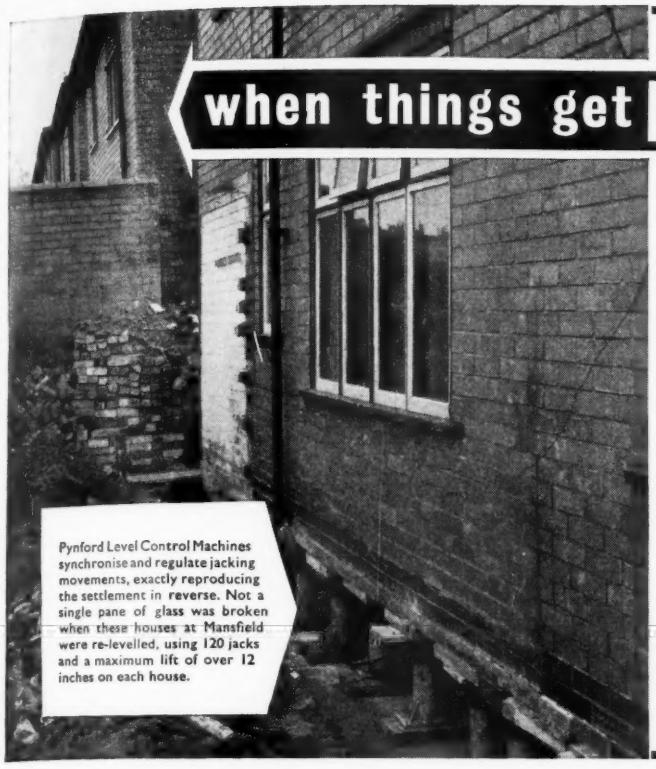

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